

BUSINESS WEEK

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A MCGRAW HILL PUBLICATION

DEC. 3, 1955

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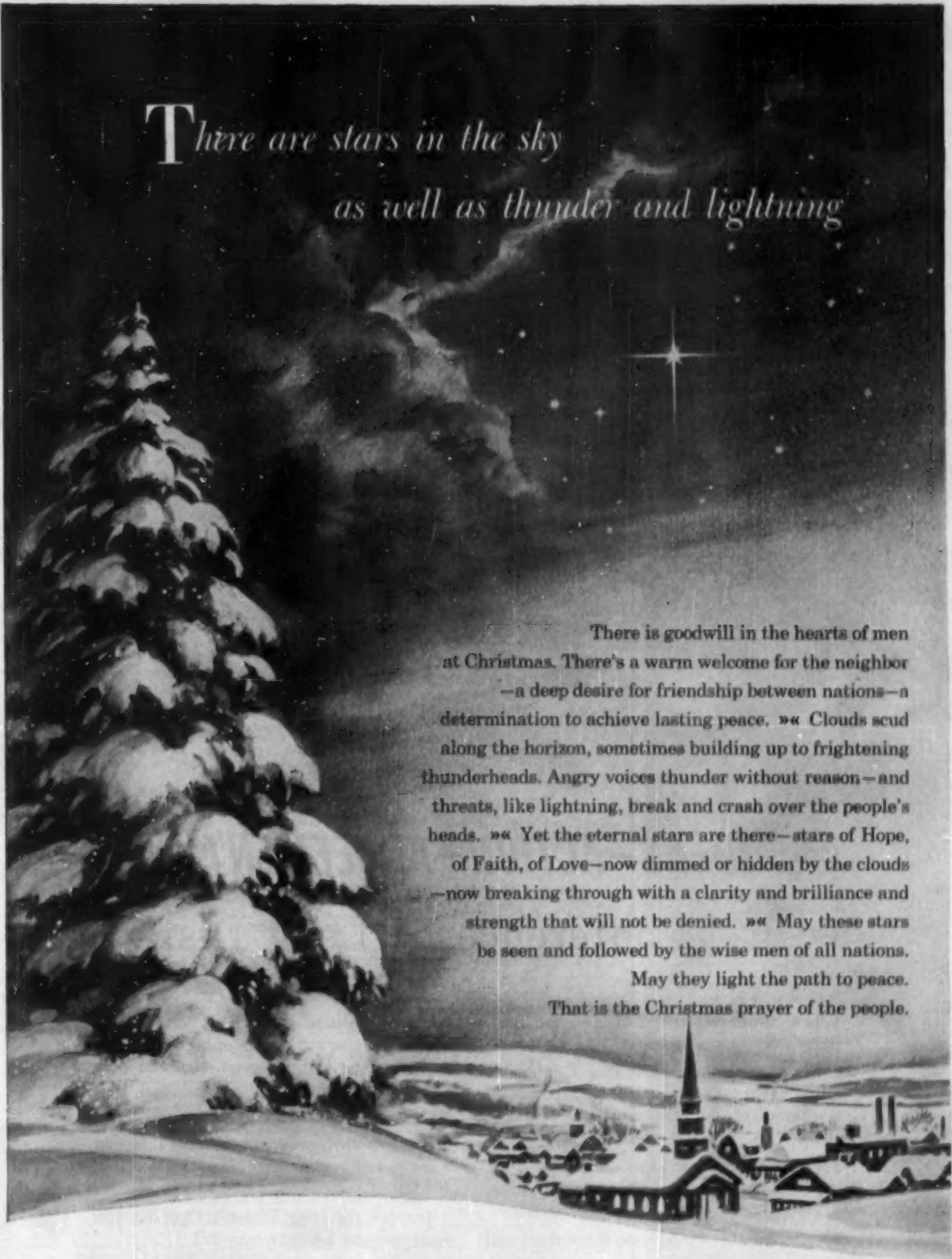
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*There are stars in the sky
as well as thunder and lightning*

There is goodwill in the hearts of men at Christmas. There's a warm welcome for the neighbor—a deep desire for friendship between nations—a determination to achieve lasting peace. »« Clouds scud along the horizon, sometimes building up to frightening thunderheads. Angry voices thunder without reason—and threats, like lightning, break and crash over the people's heads. »« Yet the eternal stars are there—stars of Hope, of Faith, of Love—now dimmed or hidden by the clouds—now breaking through with a clarity and brilliance and strength that will not be denied. »« May these stars be seen and followed by the wise men of all nations.

May they light the path to peace.

That is the Christmas prayer of the people.

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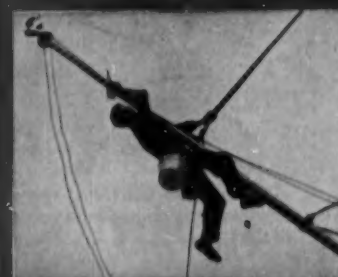
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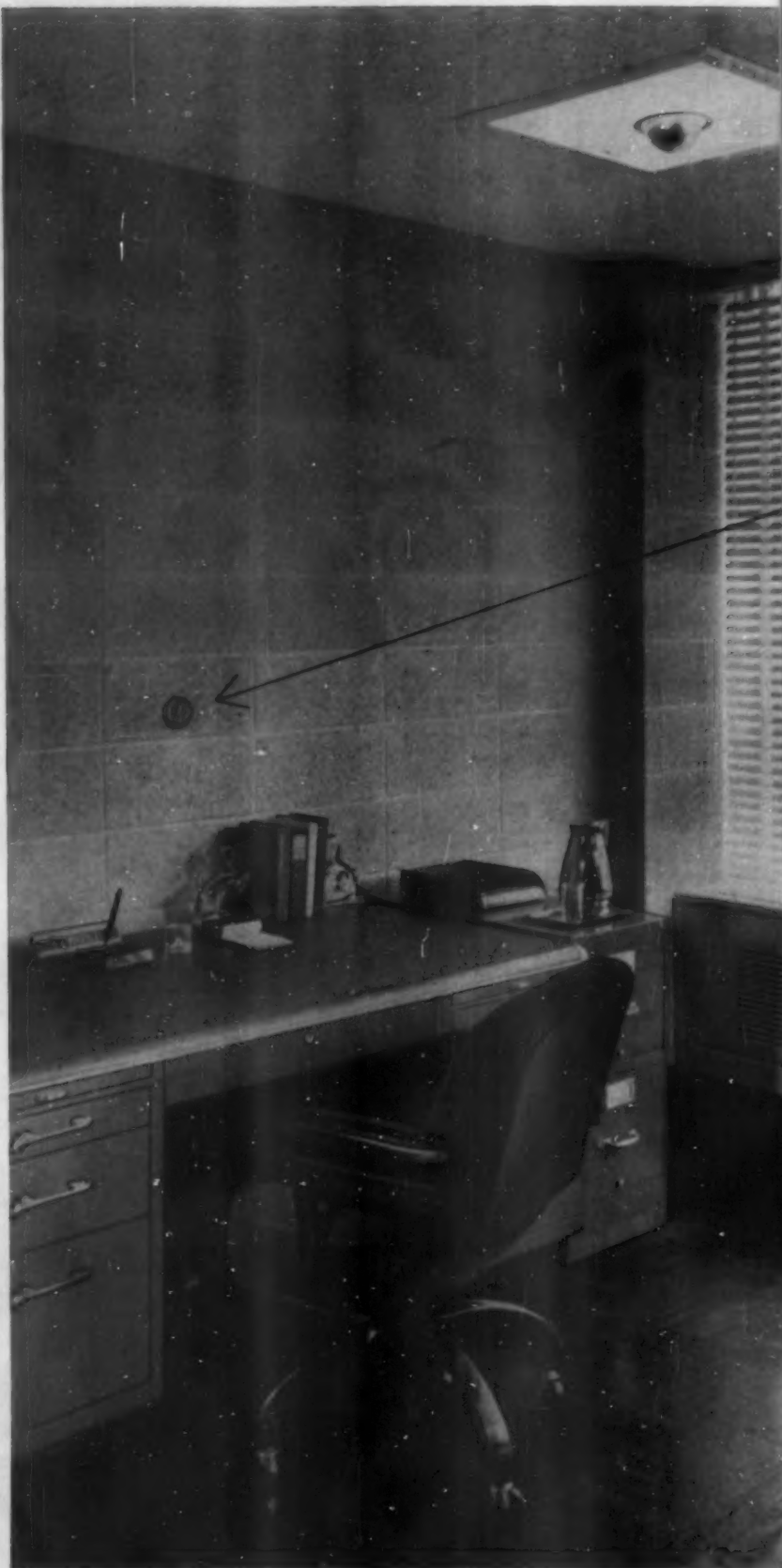
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Pneumatic
Round brings



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THIS completely new thermostat, the Honeywell Pneumatic Round, will increase comfort in offices and rooms—will make your employees more efficient—your tenants and guests more satisfied.

Just set it at the exact temperature you want, and it *automatically* controls both your heating and cooling—summer and winter. Only a thermostat on the wall can give you this perfect control—automatically adjusting the heating or cooling to match the changing weather and the number of occupants. Contrast this with the usual manual switches, dials and valves that require your personal attention several times a day.

This handsome, bronze-colored instrument is the first completely new pneumatic thermostat since the trend to contemporary styling in modern architecture. It was designed with the co-operation of Henry Dreyfuss, design consultant, and features one easy-to-read scale for both the thermometer and the thermostat setting indicators.

The new concepts embodied in the Pneumatic Round will save on your fuel bills, too. Honeywell borrowed the force-balance principle from its precision industrial instruments and developed an extra-sensitive bimetal element to provide faster, more precise response. The Pneumatic Round is the most efficient instrument of its type on the market.

To find out how the pneumatic Honeywell Round can provide ideal comfort in each office, apartment, room or area of your building, call your local Honeywell office. Or send your inquiry today to Honeywell, Dept. BW-12-175, Minneapolis 8, Minnesota.

MINNEAPOLIS
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First in Controls

112 offices across the nation



1 R. H. Barnard, president of L-O-F Glass Fibers Company, Toledo, Ohio, compares lightweight glass-fiber-blanket material with a package of cigarettes. Looking on are Vice President J. M. Johns (left), director of sales, and Vice President Thomas A. Collins, assistant to the general manager. "We depend upon

suppliers like Wyandotte," says Mr. Barnard, "to help us maintain our 24-hour-a-day production schedule. They deliver raw materials in quantities we need . . . at the time we need them." Wyandotte products are basic to many industries, including: paper, paint, petroleum, detergents, textiles, rubber—and, of course, glass.



2 Glass-fiber yarns and reinforcing strands come in a variety of spool shapes to meet special needs. Product uniformity in glass fibers is assured by quality chemicals, such as Wyandotte soda ash—a vital ingredient, also, in paper, chemicals, soap.



3 Finely woven glass threads make luxurious, color-bright draperies and curtains. Here is an example of the wonders of chemistry . . . wonders which Wyandotte, with its research facilities, and as a major source for chemicals, helps make possible.



4 Above: Test proves glass-fiber screening is stronger, lighter, more durable. Wyandotte chemicals are tested, too, for commercial purity before shipment. You'll notice important savings in chemical costs when you buy from Wyandotte by carload.



Wyandotte chemicals at work in industry . . .

Threads of glass sew up new markets

Less than thirty years ago, scientists produced fine glass threads for commercial use in decoration. Subsequent technical improvements spawned a great, new industry: spun, or fibrous, glass.

One of the rapidly growing manufacturers in this booming young business is L·O·F Glass Fibers Company, whose products—such as thermal and acoustical insulation, textile yarns, underground pipe wraps, high-temperature insulation, plastic reinforcements—are finding ever-increasing uses: insulation for aircraft, autos, air conditioners; yarns employed in making heating pads, cable covering, fishing rods; glass cloth for molding into electrical panel boards; filling for life preservers . . . to name just a few.

Like many important glassmakers, L·O·F Glass Fibers Company relies on Wyandotte for soda ash—a basic ingredient (about 10%) in glass. For, Wyandotte has had more than 65 years' experience serving the glass industry—with both raw-material chemicals and technical help.

How about *your* business? As a supplier to nearly *every* industry that uses chemicals—organics and inorganics—we'd like to serve you. *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.*



Wyandotte CHEMICALS

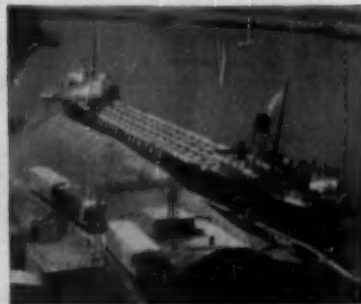
Organics, Inorganics — World's largest manufacturer of specialized cleaning products for business and industry



5 L·O·F Glass Fibers' thermal- and sound-insulating blanket material is widely accepted by automobile makers for use as hood liners. Wyandotte offers manufacturers a complete line of basic chemicals, including: caustic soda, chlorine, and bicarb.



6 Colorful, molded chairs made of glass fibers and synthetic resin are finding favor among young moderns. Wyandotte supplies the plastics industry with valuable glycols—the miscible, odorless chemical used in the production of these resins.



7 Wyandotte's ownership of natural resources—like limestone and salt for soda ash—assures quality control from start to finish. Our modern research center is geared to give you technical help. Write us, giving full details on your own particular needs.

THE PACKAGING NEWSFRONT

A combination of a Bemis-made Burlap Pallet Cover and palletized shipping is saving substantial amounts of money for one of the leading U. S. jute mills supplying yarns to the carpet industry. The labor savings come at all stages of handling and warehousing.

The conventional method of shipping jute carpet yarn is in a burlap bag, or bale, containing sixteen tubes of yarn. The bale, with a hand-sewn closure, weighs about 320 pounds. The 78 bales constituting a carload must be individually weighed, transported and stacked numerous times en route to the carpet mills.

The Bemis-made Pallet Cover, an octagon-bottomed burlap container, holds 85 tubes—17 tubes in each of five layers stacked on a wooden pallet. With the pallet pack in place, the unit load is wired and ready for moving by fork truck. The total weight is between 1,700 and 1,800 pounds.

Both loading and unloading time and labor are reduced up to 65 percent with the new method and, since the pallet pack is easily stacked three-high, considerable warehouse space is saved.

Labor-saving in opening the packages for use is even greater—up to 80 percent. The binding wires are cut and the pallet pack cover lifted off... that's all.



A Chicago manufacturer of ironing board covers, a highly competitive item, reports that he has gained both a selling advantage and lower packaging costs, by switching to Bemis Polyethylene Flip-Close® bags.

Department store buyers approve the package because it permits customers to examine the product on the counter without mutilating the package or soiling the contents. One retailer has put a small sign on the counter telling customers that they may examine the covers by merely raising the flip-closure of the bag.

Packaging costs have been reduced primarily because the workers who insert the covers in the bags "flip" the packages closed as they are placed in the master carton, completely eliminating the sealing operation necessary under the old method.

You can answer so many needs with Bemis products... both in and out of the packaging field. If you need a package that will increase sales, give better protection to your product, or simply save you money... or if you are interested in other Bemis developments in paper, textiles or plastics... consult us. Bemis products meet an astounding number of industrial, commercial and recreational requirements, and new uses are continually coming to light. You may want our engineers to create a new package, or to advise you on packaging methods. Please write us.

Bemis



408 D Pine Street
St. Louis 2, Mo.

READERS REPORT

Sunpower Tricks

Dear Sir:

Your article, Sunpower Learns a New Trick [BW—Nov. 5'55, p27] is somewhat misleading.

It is very true that Bell Telephone Laboratories have made a remarkable discovery in the so-called solar battery. The name solar battery is somewhat of a misnomer, however. The Bell development is capable of converting solar energy into electrical energy, but does not have the ability to store the electrical energy as your last sentence in the article indicates.

Due to the inability to store electrical energy, Bell searched for a secondary type battery which could be charged with a very low current and which could take over the load responsibility when there was little or no sunlight available. We provided the answer to this with another recent and almost as spectacular development. This is a hermetically sealed nickel-cadmium secondary, or if you prefer, rechargeable battery. This is the first successfully produced, sealed, rechargeable battery ever to be marketed. Bell uses a great number of these batteries in the circuit with the solar cells. We prefer to call their solar battery a solar generator, since it actually generates an electrical current...

A. W. BRUNSELL
GOULD-NATIONAL BATTERIES, INC.
ST. PAUL, MINN.

Old Style Clubs?

Dear Sir:

I enjoyed very much reading your recent article about investment clubs [BW—Nov. 5'55, p41]. However, I would like to take exception to, or at least make some comment on, some parts of the article.

We in the National Assn. of Investment Clubs have every reason to believe that while the bull market has helped in the creation of investment clubs, the association itself has been the real reason for the tremendous growth of clubs in the past four years. All indications point to the fact that there were not more than 500 clubs in existence in 1950 when the association was organized. A great many people had the idea of a club in the back of their minds, but were lost as to how to proceed and how to anticipate some measure of success. The National Association provided first

What happened when fire struck in two department stores



Without Sprinklers — Two buildings were destroyed, six severely damaged, and nine moderately damaged in this \$3,000,000 blaze. The fire started in an unsprinklered department store.



With Sprinklers — A fire in the Krauss Company, Ltd. store, New Orleans, was quickly extinguished by Grinnell Automatic Sprinklers. "Not until the sprinkler system had practically extinguished the flames," reported Mr. Leon Wolf, Treasurer of the company, "did we know that the fire existed."

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Grinnell Sprinklers perform with *automatic* certainty. They stand ready day and night, year after year, to stop fire when it starts . . . during those first few moments when a *little* water will do what *tons* of water often cannot accomplish later.

Listen to this, from the report on the disastrous fire pictured above, "Flames were coming from the roof when first noticed and had spread to two nearby buildings before apparatus arrived."

In terms of losses from fire, the cost of Grinnell protection against fire is small. When you consider that installation of a Grinnell Automatic Sprinkler System reduces fire insurance premiums from 50% to 90%, it becomes an investment that pays for itself within a few years, and then starts paying you substantial cash dividends.

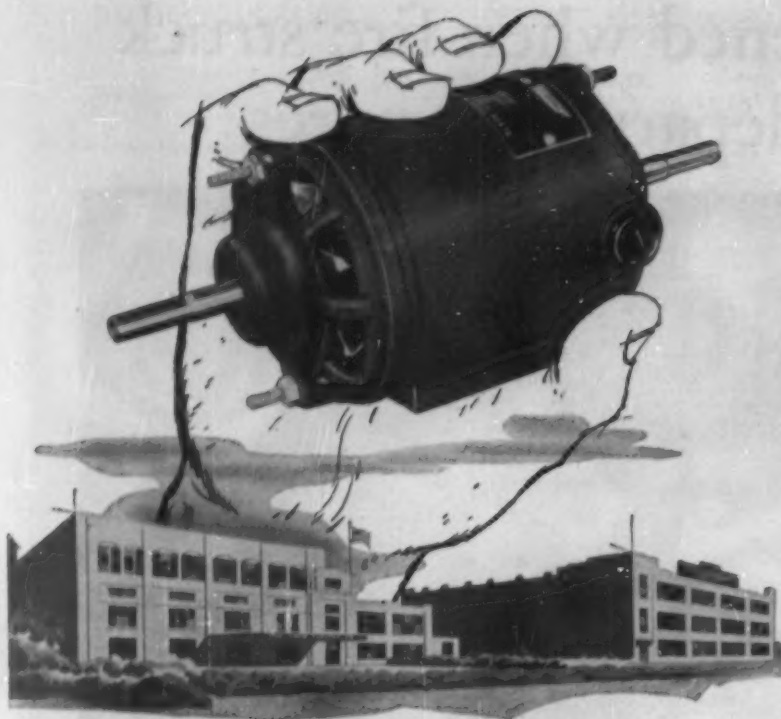
We shall gladly survey your property and submit an estimate, without cost or obligation. Write or phone Grinnell Company, Inc., 265 West Exchange Street, Providence 1, Rhode Island.



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Ruggedly constructed
equipment motor.

Swivel-mounted
portable tool motor.

Turbine for canister-
type vacuum cleaner.

a set of sound principles; secondly, a guide to easy organization.

It has been our experience that the speculative type of club, to which you give so much prominence in your article, is very much in the minority in the new investment club movement.

In one section of your article, you quote a Merrill Lynch man as stating, "Can a club legally act for its members?" This has not been a problem for investment clubs for many years since most of them, following the plan of organization of the National Association, appoint an agent to act for the club and conduct all of the club's business by agency agreement. In the 57-year history of investment clubs, which the association has uncovered, there is no record of any legal problem which impedes the operation of a club.

Regarding the S.E.C., the Washington Office of the Commission has been well aware of the growth of the investment club movement and to our knowledge, has not shared any of the "trepidation" suggested in your article.

Actually, there are three provisions in the Securities Act, which would exempt investment clubs from registration. Two of them you mentioned in your article. The third is a provision which specifically exempts transactions between 25 or less individuals. We have never had any indication from the S.E.C. that it regards investment clubs in any way in violation of the Securities Act of 1933.

We hope sometime in the future you will do another article on investment clubs and place the emphasis not on the old 1929 style of speculative club, but on the new serious and studious investing club.

THOMAS E. O'HARA

CHAIRMAN
NATIONAL ASSN. OF INVESTMENT
CLUBS
DETROIT, MICH.

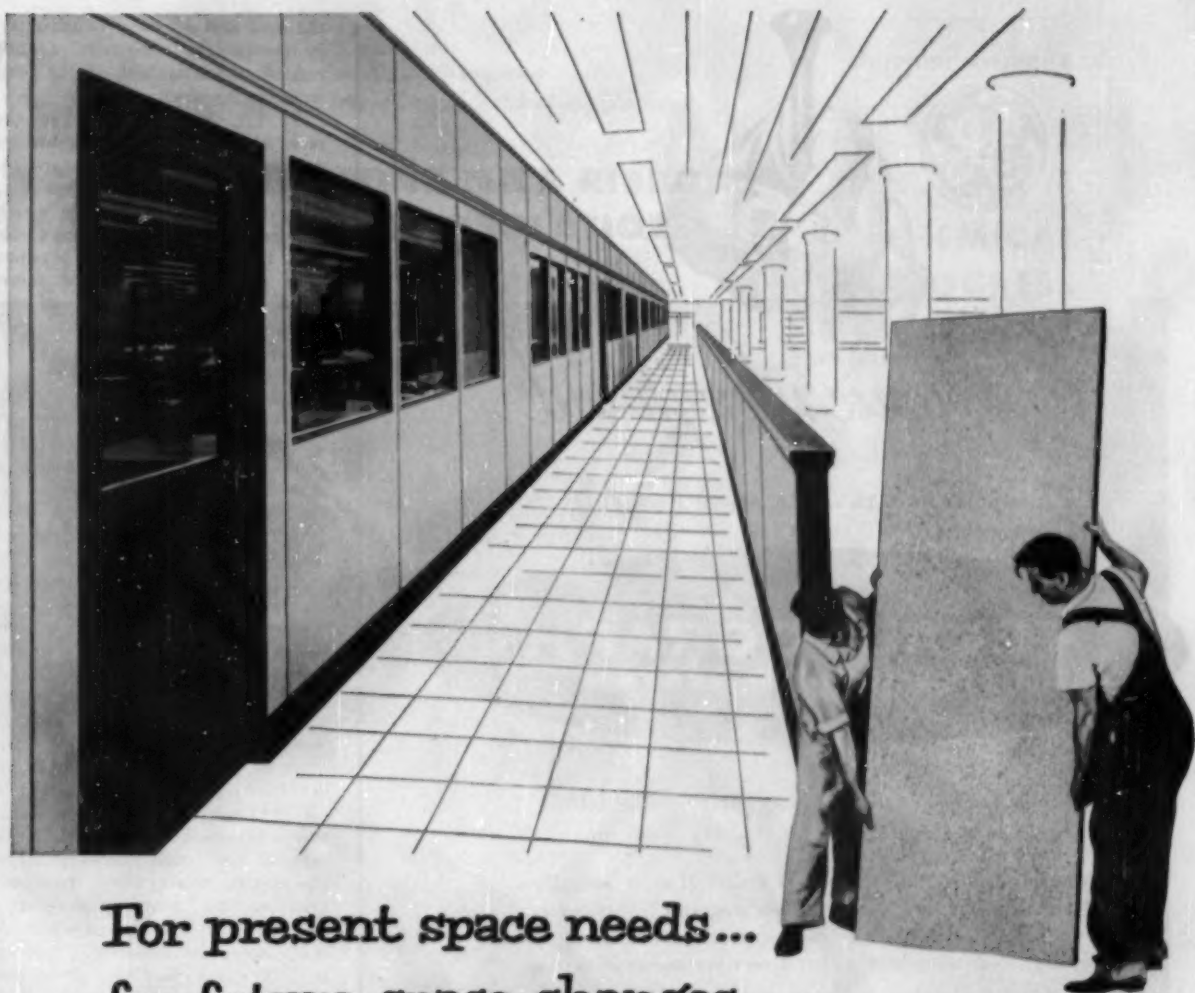
Trading Research Blows

Dear Sir:

As a participant in the recent Univ. of Illinois conference on motivation research, may I offer a few comments on Reader Harger's recent letter [BW—Nov. 19'55, p10]. . . the gist of [his] letter follows:

1) A distinction is made between most management consultants, the "professionals," and "men associated with universities and colleges, the 'academicians.'"

2) The "professionals" use qualitative methods based on small samples . . . they "get out into



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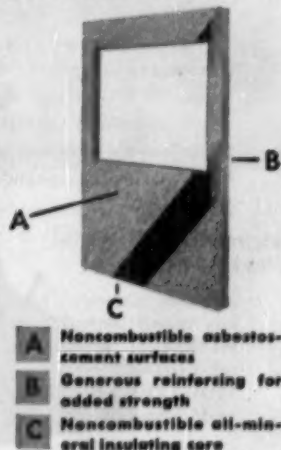
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the field and get their 'hands dirty' in interviewing consumers" (a *fine* reflection, I must say, on the poor suffering housewife).

3) The "academics," on the other hand, support quantitative methods . . . because they "are unable to leave their campuses . . . and do the kind of field work which the professional practitioners do. . . . It is not possible to produce high percentages of valid interviews . . . through the use of students. . . . Academics do not find it easy to interpret . . . the findings of the student interviewers . . . they are not so practiced, they lack broad operating experience."

This letter reminds me of the well-known statement preceding many movies, "Any similarity of the characters portrayed in this performance to people living or dead is purely coincidental." If there is one discipline where a clear-cut distinction between "professionals" and "academics" can not be made, it is marketing. There are, to be sure, some academic people who have always been teaching and do little or no commercial work. There are also even more commercial researchers who have never taught marketing courses (not all by choice, either). At the same time, however, there is a large number of researchers—perhaps the majority—who move from one area to the other periodically, or who are actively engaged in both areas simultaneously. It is in this group that one finds the leaders in both "qualitative" and "quantitative" research and toward whom Reader Harger's remarks are primarily directed.

To designate lack of "broad operating experience" or desire for supplementary income as the basis for the criticism of small samples in motivation work is to reveal an astounding ignorance regarding the true state of affairs. This becomes self-evident when we consider two of the three leading critics of small samples at the Illinois conference. (The third person is myself.) Darrell Lucas, a professor at N.Y.U., is also technical research director for the Advertising Research Foundation and the originator of one of the basic advertising recognition methods in commercial use today (even by management firms). Rensis Likert is the head of the Institute for Social Research at the Univ. of Michigan (of which the Survey Research Center is a part), an organization doing extensive work for business. These are the people who lack the "experience, maturity, perception, and

Q. *Could chemical science find a way to improve mica insulation for high-temperature electrical applications?*

A. NOW...MILE-LONG MICA RIBBONS FOR ELECTRICAL INSULATION

Another example of



**CHEMICAL
PROGRESS**



Mica is basic for high-temperature electrical insulation. But up to now, its use has been limited—because it was rigid, difficult to apply. Could chemical science make mica *more flexible* for easier, broader application?

Mica mat is General Electric's chemical contribution to mica insulation. Composed of myriads of tiny mica flakes—in *continuous sheet form*—mica mat rolls off the production line in silvery, mile-long ribbons.

Better than mica? Mica mat has far greater flexibility. It is more uniform, and completely free of voids. Less is needed for a given job, too: perhaps 25% less to insulate 10,000 volts.

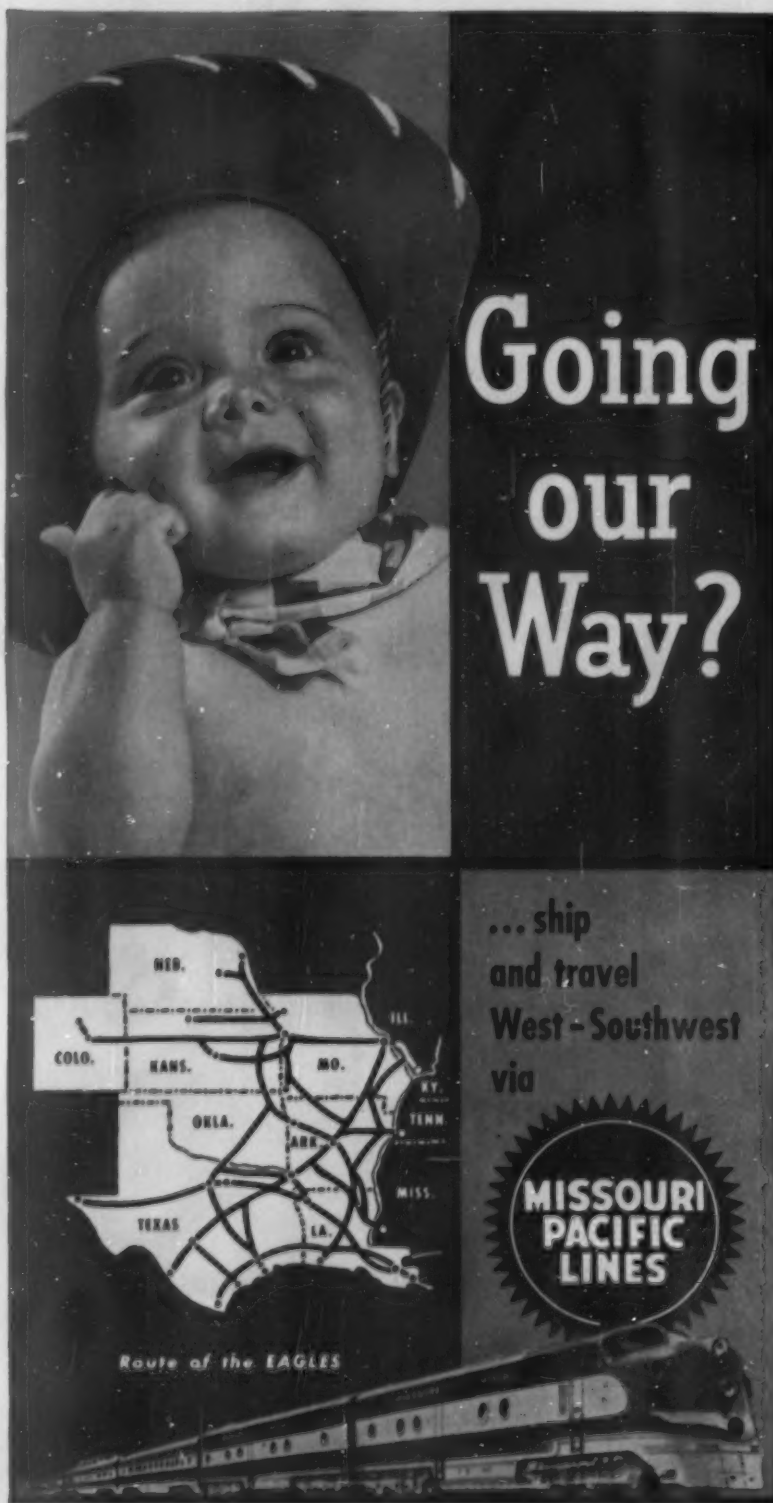
Thanks to mica mat, America is now "wrapping" its

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• • •
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via

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Route of the EAGLES

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judgment of the "professional"?

Both of these men have not only been active in commercial research for many years, but are extensive users of a variety of motivation techniques themselves! Likert, for example, is the author of several scaling techniques himself. What is perhaps even more significant is that they have had wide experience in the use of *both* so-called quantitative and qualitative methods, and should therefore be in a far better position to judge the value of either than those . . . who rely on only one approach as the panacea to all their problems. (Quantitative methods can at times answer motivation questions far more quickly and economically than projective techniques. . . .)

Certainly some students are poor interviewers, though these are usually weeded out in advance. . . . The same thing is true of some "professional" interviewers. Well do I recall a day when I was being cajoled by a businesslike "professional" interviewer (for a management firm, no less!) to state what I liked about brand X who ended up by saying, "Would you mind if I put some remarks down for you anyway? It doesn't look nice not to come back with at least a few favorable reports!"

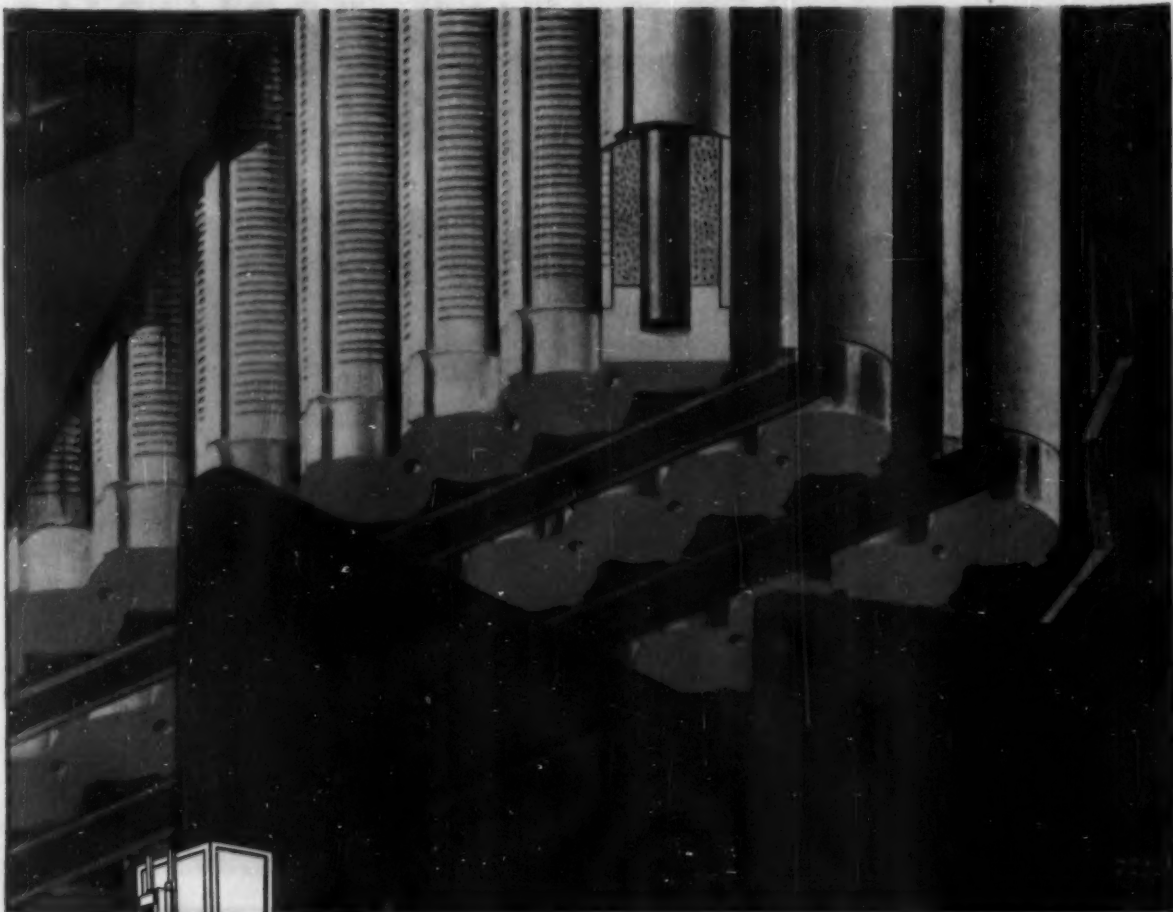
Finally, Reader Harger overlooks the fact that this controversy extends beyond the question of sample size and in some respects is independent of it. Thus, as was noted by Lucas and others at this conference [BW—Oct. 29 '55, p. 60] the validity of many projective methods is as yet an unsettled question, and instances abound of their misuse in commercial research. Very often, the only way of validating results derived by such methods—whether based on large or small samples—is by following up with a quantitative survey designed to test the hypotheses. Not to do so can result in a loss of much further valuable information and may even leave faulty hypotheses undetected. The interview process itself is a major source of bias in projective interviews. . . .

What it all boils down to is that Reader Harger has a completely distorted picture of the situation.

. . . I suspect that readers will find many more laughs in [his] letter than he claims to have found in *BUSINESS WEEK's* report of the motivation research conference.

ROBERT FERBER

RESEARCH ASSOC. PROF. OF
ECONOMICS
UNIV. OF ILLINOIS
URBANA, ILL.



Slotted tubes extruded from BAKELITE Polyethylene by Jessell Plastics, Inc., Kensington, Conn. for the Exide Industrial Division of The Electric Storage Battery Company, Philadelphia 2, Pa.



Corrosion-Resistant Polyethylene Parts Boost Battery Power, Working Life

The new "Exide" "Ironclad" battery was developed for heavy-duty service . . . for example, powering of lift trucks. It's got the usual dimensions, but it's a bigger battery. According to the manufacturer, it packs 20 per cent more power . . . delivers 100 per cent capacity initially (not the ordinary 85) . . . and its working life is longer than that of earlier models.


New design and a new material made it possible. Finely slotted tubes extruded from BAKELITE Brand Polyethylene hold the active material of the positive plates. They permit maximum exposure to the electrolyte. And being BAKELITE Polyethylene, they don't cor-

rode and shorten battery life. To complete the picture, the bottoms of the tubes are closed with sealers molded from BAKELITE Polyethylene.

Corrosion resistance is just one important advantage of BAKELITE Polyethylene. This material is readily molded or extruded into finely detailed shapes. It is the lightest commercial plastic. Dielectric properties are outstanding. It is supplied in a wide range of colors.

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HOW *HERCULES* HELPS...

SCHOLARSHIP WINNERS in last year's 4-H Entomology Program are pictured with Hercules President A. E. Forster. Each year Hercules awards six college scholarships, plus state and county prizes, to winners in this program. The competition is sponsored by Hercules to develop tomorrow's farm leaders. Pictured are: Barbara Ristow, Indiana; Edwin Jones, Arizona; Mr. Forster; Brenda Adams, Oklahoma; Louise Ottaway, Kansas; David Anderson, Rhode Island; Judith Gates, Oregon.



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BUSINESS OUTLOOK

BUSINESS WEEK
DEC. 3, 1955



Production of goods and services in this country probably will reach an annual rate of \$400-billion in next year's first quarter.

Output may be able to rise only a little, for it's already pushing capacity. But rising prices will take a hand.

Apparently the seasonally adjusted valuation on gross national product will be at an annual rate of \$397-billion to \$398-billion for the final quarter of 1955. This is indicated by the Federal Reserve Board's estimate of \$387-billion for the full year.

Thus the year's output of goods and services is topping 1954's \$361-billion by better than 7%—a gain that has been only very slightly influenced by price changes until quite recently.

—•—

Can production continue to expand as it has been doing?

And will business need to invest so much money next year?

Such questions, obviously, will be answered by the consumer. They may sound a mite academic at the moment. But they aren't, for we now have our first insight into consumers' plans for 1956 (page 158).

These plans aren't so reassuring as they might be (and were a year ago). We must rely less on consumers in 1956 than we have this year.

—•—

You can begin to get a line on the size and shape of the economy for 1956 if you run down the component parts:

- Business spending: Plans call for record outlays on new plant and equipment (BW—Nov. 12 '55, p. 27). But plans may be cut back (and inventory buying in particular might lag) if market growth dwindles.
- Consumer spending: Here's the big market—what people buy. And people aren't boosting their spending ideas the way they were a year ago.
- Government spending: Federal outlays can't go down much (and may rise); state and local programs will go on expanding.

—•—

Consumers figured, a year ago, that they were ready to spend as never before. Their intentions, in fact, seemed almost too good to be true. But results have amply borne out the forecasts.

Now, with a new survey available, 1956 looks less splashy. Consumers probably won't spend less, but the rate of rise will flatten.

About as many people want to buy houses as a year ago. Perhaps a few more are in the market for major appliances. Fewer want autos.

Such attitudes are subject to change, but these are highlights from the latest study by the University of Michigan's Survey Research Center.

Guesswork as to why consumers are less exuberant may be idle. But many observers will wonder if there hasn't been overbuying in 1955.

Purchases of new autos and new homes will be cited as examples.

Rapid accumulation of personal debt surely will be held up as evidence—both installment debt and mortgage debt.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

DEC. 3, 1955

Expansion of mortgage debt this year has been the largest on record—probably a total of \$10-billion (net of repayments). This would bring the total outstanding to around \$85-billion.

The year's rise in installment debt will top \$5-billion; total obligations at yearend will be some \$27½-billion.

Business spending, in the nature of things, always is responsive to any leveling out or decline in consumer purchases.

Outlays on new plant and equipment can't be shut off. But suppliers can be asked to slow up a bit on deliveries. And work not already begun can remain temporarily in the blueprint stage.

Inventory policy, though, can be modified at once. When orders let up a bit, you don't have to buy so frantically; if the volume of new orders actually falls off, you begin living off the shelf.

Commercial expansion (seen rising 8% to nearly \$7-billion in 1956 in McGraw-Hill's survey of business outlays and to more than \$7½-billion in 1957) would be hit most immediately by slackening demand.

Planned spending here can be cut more quickly than in manufacturing.

Supplying goods for consumers will account for output this year with a retail value of something over \$185-billion. This will outdo all previous marks by \$14-billion or so.

Speeding up to make that record has been the principal dynamic force in this year's boom.

If we were to level off now, a lot of the zip would be gone.

Inventory growth for 1955 will be about \$3-billion. (But that's really a \$6-billion booster when you reckon in last year's \$3-billion drop.)

Government spending has been a negative factor in 1955, due to further reduction in federal outlays of more than \$3½-billion. Most of this was made up, though, by the state and local governments with expenditures of some \$30-billion, up \$2.2-billion from 1954.

Spending by government, at all levels, now constitutes about a \$75-billion segment of the total economy, and this segment points upward.

Just to meet higher prices will call for some addition in 1956.

In addition, a new federal program for highway aid will provide some increase, and there may be something more for schools. Quite aside from federal aid, states and municipalities will spend more.

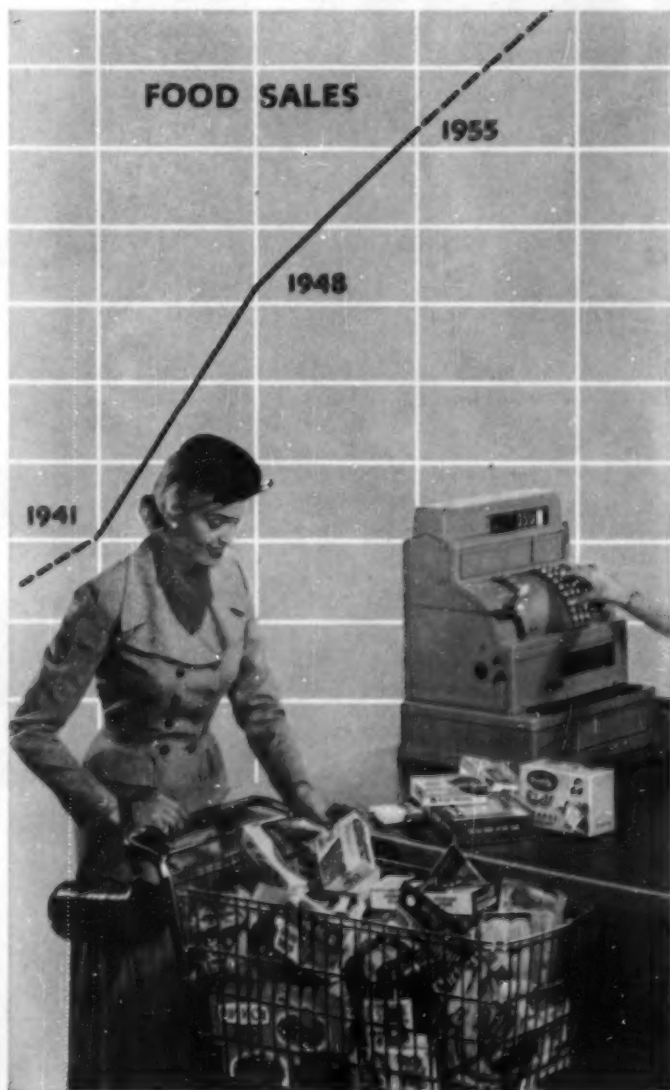
Evidences that the price trend still is in the direction of a creeping rise were at hand again this week:

- Cement was boosted by enough companies so that higher quotations, at least over most of the country, seemed certain for Jan. 1.

- Steel was raised, across the board, by one small producer. Meanwhile higher "extras" were noted here and there on many products.

- Copper was riding up merrily in world markets, and at home prices up to very nearly 50¢ a lb. were being paid in "the outside market."

The Clamor for Convenience



Does anybody buy a whole chicken any more?

Not your typical housewife. "All that work? I should say not!" She'll have the legs ready-packaged, thank you. The livers frozen. The chicken noodle soup in handy little bags.

She doesn't want food; she wants *food plus convenience*. Her demands have pushed food sales from twenty billion dollars in 1941 to nearly seventy billion today.

Every sign points higher still: a record crop of children nearing their hungry teens . . . a million families a year crossing the \$5,000 income level . . . one dollar in every four earmarked for food.

Marathon's role: provide the *convenience* along with the food. Give the packaging more allure . . . more purpose . . . more sell.

It is a familiar role. The shelves of the supermarket are a gallery of Marathon contributions—the *packages* which have done so much to lead food sales to their present high.

And tomorrow? It is estimated that, by 1960, housewives will be spending an additional three and a half billion dollars just on new *forms* of food! Much of the newness will be the package.

Little wonder that Marathon has more people than ever working on new package development and research. Equally important in meeting new demands: Marathon controls every step in package making, from the tree to the finished product.

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Menasha, Wisconsin

*Things look bright
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efficient and most economical in the long run.

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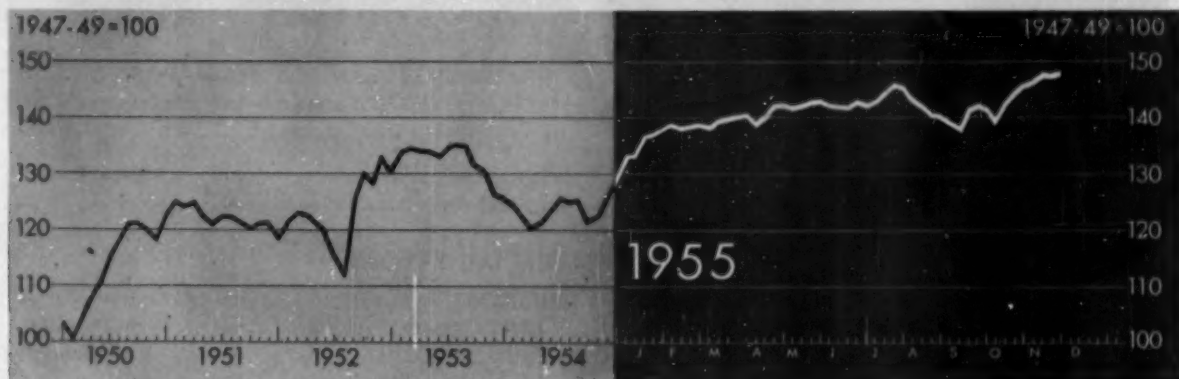
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FIGURES OF THE WEEK



Business Week Index (above) *148.6 †148.5 146.5 131.6 91.6

PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons).....	2,394	†2,416	2,400	1,941	1,281
Production of automobiles and trucks.....	181,116	†213,468	188,283	139,858	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$56,996	\$59,527	\$60,623	\$53,487	\$17,083
Electric power output (millions of kilowatt-hours).....	10,727	11,149	10,659	9,087	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,859	6,851	6,750	6,270	4,751
Bituminous coal production (daily average, thousands of tons).....	1,700	†1,670	1,627	1,512	1,745
Paperboard production (tons).....	279,120	294,652	288,522	244,798	167,269

TRADE

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	74	77	80	70	82
Carloadings: raw materials (daily av., thousands of cars).....	55	56	59	47	53
Department store sales (change from same week of preceding year).....	+6%	†+8%	+8%	+2%	+30%
Business failures (Dun & Bradstreet, number).....	205	214	230	226	22

PRICES

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	401.5	†398.7	401.3	410.4	311.9
Industrial raw materials, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	100.3	99.3	97.4	89.2	††73.2
Foodstuffs, daily index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	74.9	†75.2	76.8	92.1	††75.4
Print cloth (spot and nearby, yd.).....	20.8¢	20.6¢	19.8¢	18.6¢	17.5¢
Finished steel, index (U. S. Dept. of Labor BLS, 1947-49 = 100).....	154.5	154.5	154.5	144.7	††76.4
Scrap steel composite (Iron Age, ton).....	\$47.00	\$45.83	\$44.50	\$32.33	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.).....	43.25¢	43.28¢	43.00¢	30.00¢	14.04¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.17	\$2.23	\$2.19	\$2.41	\$1.97
Cotton, daily price (middling, 14 designated markets, lb.).....	33.61¢	33.64¢	33.50¢	33.83¢	**30.56¢
Wool tops (Boston, lb.).....	\$1.70	\$1.70	\$1.70	\$2.09	\$1.51

FINANCE

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
90 stocks, price index (Standard & Poor's).....	361.6	†361.7	335.9	272.6	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.59%	3.59%	3.59%	3.45%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2½%	2½-2½%	2½%	1½-1½%	4-1%

BANKING (Millions of dollars)

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Demand deposits adjusted, reporting member banks.....	56,377	56,027	57,066	56,254	††45,820
Total loans and investments, reporting member banks.....	85,362	85,781	85,571	85,897	††71,916
Commercial and agricultural loans, reporting member banks.....	25,831	25,783	25,124	22,137	††9,299
U. S. gov't guaranteed obligations held, reporting member banks.....	29,962	30,377	30,922	37,411	††49,879
Total federal reserve credit outstanding.....	26,208	26,272	25,747	25,900	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Imports (in millions).....September.....	\$945	\$959	\$780	\$412

* Preliminary, week ended Nov. 26, 1955.
† Revised.

†† Estimate.
** Ten designated markets.

‡ Data for "Latest Week" on each series on request.

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How to take a jet's pulse . . . six miles up

Picture 36 men with notebooks and pencils perched on the wings of this jet—busily recording stresses and pressures as the Super Sabre roars through its supersonic, miles-high test flights. That's the kind of job done *photographically* at North American Aviation with an oscillograph recorder.

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John O. Gantner, Jr., President of Gantner of California, reveals why

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"They say a woman will always have the last word. It's certainly true when she shops for a swimming suit!

"She waits till the last possible minute, and insists she get the 'last word' in style. Pressure on stores is terrific. If 'hot' styles run out of stock, those sales are gone forever.

"But our retail accounts know they can depend on Gantner.

"Gantner styles can be restocked to any store in the country in a few hours, *while the ads are running*. Not a moment is lost — not a sale is lost — thanks to Air Express!

"And one last word — about costs. Specifying Air Express can save you money, too. 15 lbs. from San Francisco to Chicago, for example, costs \$10.91. That's \$1.09 less than any other complete air service!"



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Auto Sales: Hints of a Slowdown

● The 1956 models started well, but that doesn't tell the whole story.

● The factory people still claim that everything is very rosy indeed.

● But plenty of dealers—though they admit the makers were right in the past—think they'll be lucky to maintain the 1955 pace, much less achieve new heights.

The year-long pace of new car sales may be slowing down. The 1956 models—nearly all of which are now on sale—got off to a fine start. Factory sales managers will cite figures to prove it. But there are other small, disquieting signs that may indicate a smaller market for next year.

For one thing, the daily selling rate for the first 20 days of November—a yardstick commonly used in Detroit—barely topped 20,000 cars. All year long it has run considerably above that figure. This doesn't worry most factory people. They retort that new models "always start slowly"—and it's true that the Nov. 11-20 period was better than the first 10 days of the month. Optimism unabated, factory people look for the market to strengthen.

• **Dealer View**—Talk to some dealers, though, and you'll find that, after the first two weeks or so, sales of the new models have trailed off sharply in some areas. In Detroit, dealers say it's just the effect of Christmas shopping. In other cities, dealers say it's because so many of the cars are little changed from 1955 models. You'll also hear the complaint that past sales on easy credit with long repayment periods have taken people out of the market now.

Regardless of reason, many dealers are disappointed with reception of the 1956 models. Almost universally, sales right now are good by most standards—but, because it's a new model time, dealers feel they should be better.

There's a recurring theme that BUSINESS WEEK reporters hear in their talks with dealers everywhere: Never since the war has it been so hard to sell an automobile.

• **Conflicting Opinions**—It's easy to

find much discouragement in the reports from dealers. As a group they are baffled and contradictory men, with exceptions such as the dealer in Omaha who says: "As long as things are moving along, you don't question them. . . . All we want to do now is to take the orders."

By and large, dealers think things like this: Sales are better than they should be. . . . Sales can't hold up. . . . Profits are down. . . . Profits are good. . . . Next year's market has already been sold. . . . You can't sell a market ahead. . . . There is overproduction. . . . But "I could sell more cars if I had them."

About the only point where the dealers' ruminations converge is on selling: This is a period of hard sell the like of which many of them have never seen before. Some acutely, some dimly, they see this as having a bearing on the market next year. Backing them up are the latest findings of the University of Michigan's Survey Research Center: Consumer intentions to buy cars are about the same as at midyear, but moderately lower than a year ago (page 158).

I. The 1956 Market

It's part of a dealer's stock-in-trade to be a mite pessimistic in talking to anyone but a factory zone man. So you'll find many of them saying that sales will be down next year but desperately hoping they won't be.

Thus, you get this remark from a Buick dealer in Portland, Ore.: "In the past, the factories have been right and we have been wrong. So I should be counting on them to be right and for

the market to pick up—but I still don't think '56 will be as good as '55."

In Greensboro, N. C., you find dealers predicting a drop of as much as 20% next year. A dealer in a normally fast-selling low-priced car says: "I think Detroit is doing a lot of wishful thinking. They've read those telegrams they asked dealers to send them saying the new models are selling like hotcakes—read them so much they've started to believe them."

• **The Other Guys**—Nearly all dealers in Greensboro feel the same way. But in Cleveland, Philadelphia, San Francisco, Washington, and elsewhere, business now generally is good, and dealers expect it to be even better in 1956. Somewhere between optimism and pessimism stand Tulsa dealers who think sales may reach the 1955 level, but no better.

As you might expect, a lot of dealers think that sales are going to be down next year—for the other guy. In Atlanta, new car dealers think sales nationally will be off from 1955, but they stoutly maintain that their own agencies will have a record year.

You have some dealers reflecting factory optimism and, like the man in Rochester, N. Y., citing some of the factory analyst's standard benchmarks: expanding economy, easier credit, feeling of economic security. And you'll find a great many of the dealers thoughtfully worrying the question of whether or not high sales this year have cut into the future market.

• **Borrowing Ahead?**—Some have decided that business hasn't been borrowing from the future. For instance, there's the Ford dealer who has been selling cars since the 1920s and is constantly amazed at the sales year after year. Sometimes he thinks current sales are borrowed from future business, but the "borrowing" goes on and on with no end in sight. As a result of constant effort, the sales level extends through every month of the year. (Other dealers, too, commented on a seeming trend away from the seasonal nature of the business.)

A Lincoln-Mercury dealer in Los Angeles gives the reasoning a twist. Although some future buyers may already have been taken off the market

by early sales, he says, more prospective buyers are being created by aggressive sales tactics. Salesmen have managed to establish a "new car habit" with many people, and buyers are going to be in the market oftener.

There are dissenters, such as the man who claims he's not borrowing from the future now, but was when he staged his cleanup selling of 1955 models. Or the one in Boston who says: "Sure, we're borrowing sales from the future. Discounting prices means just that. This borrowing can continue for another year. After that we can watch out for the reaction."

II. Prices and Profits

You can get particularly depressed when you talk to dealers about prices. With few exceptions, dealers started selling 1956 models at discounts (or over-allowances on a trade-in). Generally, the discounts are of the mid-summer variety—say \$200 to \$300 off list. But more than one dealer says he's selling at cleanup-time prices, and that may mean a net of \$50 or less per car.

- **Factory Price Rise**—While any discount logically would mean the dealers haven't been able to pass along the factory price increase on 1956 cars (generally from 3% to 5%), several dealers comment specifically on that fact. A Tulsa dealer for one of the low-priced cars says: "We haven't been able to hold the price increase, and the overage we are granting on trade-ins is about the same as during the cleanup of the '55s. Last year we held a major portion of our gross for the first 90 days. We couldn't this year."

An Oldsmobile dealer in Des Moines says the public won't go along with the increases. "We have only one manufacturer to buy from. The customers have lots of dealers to choose from. Obviously we can't pass along that increase in list price."

- **When Is Discounting?**—It's plain from what the dealers say that discounting is now the normal procedure in selling cars (except for the high-priced makes). Two years ago, discounting on the new models (at that time the 1954s) heralded the drop-off in the market. But discounting today doesn't necessarily mean the same thing. As one dealer says, "The buyer has been educated to ask a discount." And a Chicago dealer says his firm discounts all the time; they just try to keep the discounts about the same.

Another Chicago dealer just about sums up the feeling about profits: "The average dealer has to see about \$200 gross in a car, and it costs him about \$125 to deliver it. He's certainly entitled to that \$75—why, when you buy a TV set, the dealer gets that much."

Even in cities where auto sales are

going great and dealers are highly optimistic, such as Cleveland, you won't find many eyebrows lifted at discounting. A Ford dealer who expects to make a gross profit for the year of 7% to 9% says the days are long gone when a dealer could gross upwards of \$500 on a car. Right now, with the new models still selling well in Cleveland, the gross is 10% to 12%. No one sees any possibility of its going any higher. "An automobile now is just another appliance," says the Ford man, "and that's the attitude we have to take."

- **Saved by Volume**—Along with acceptance of discounting as a way of life, dealers seem to have accepted, perforce, the profit-through-volume philosophy. Says a Portland dealer: "I have to sell three cars to make the profit I made on two last year. Volume-wise, we are selling more, but that isn't the complete picture. We are having to pull out all the stops to sell these cars—and we have to sell them to stay in business."

III. Salesmanship

BUSINESS WEEK has already surveyed the dealers three times this year; never before have they had so much to say about the need for hard selling.

From Portland: "Our sales effort is 10 times what it was a year ago. We are ringing doorbells, using billboards, radio and newspaper ads, and intensive phone campaigns. There just isn't the market."

From San Francisco: "This dealer says he can match 1955 sales if he can induce his salesmen to work. He has a staff of 22, and about 10 or 12 are producers. Turnover in salesmen has been worse in the last few months than any time in recent years."

From Los Angeles: "You simply don't find the old type of doorbell-ringing salesman anymore."

- **Ringling Doorbells**—Dealers who bemoan the fact that salesmen don't work as hard as they should are turning to heavier advertising. In Atlanta, most of the dealers have hired more salesmen and also stepped up advertising. In city after city, the dealers are increasing their use of the telephone.

And in Cleveland the "hard sell" also has reached the doorbell-ringing stage. A Plymouth dealer is having his salesmen make personal house calls on prepared lists of possible buyers, rather than wait for customers.

"The guy who comes into your place," he says, "has already decided to buy a car and has already been to 15 other dealers and is looking only for price. What we're after is the guy who is undecided whether he should buy. And the only way to get him is to go out to his house and peddle him a car the way you'd peddle insurance."

Heat on GM

Dealers warm up Senate probe into General Motors with charges of pressures and vassalage.

For almost a month, the General Motors Corp. hearing before the Senate Antitrust and Monopoly subcommittee sputtered along weakly. But this week it began heating up fast. Automobile dealers supplied the added warmth when they began telling their side of the fiery manufacturer-dealer relationship story.

And, at midweek, GM was assembling a powerful parade of its own spokesmen. GM's parade will start with the appearance of Board Chairman Alfred P. Sloan, Jr. On his heels next week will come a dozen or so GM officers, including the heads of some of the company's departments and car divisions. GM's Pres. Harlow H. Curtice is expected to be the last man in the witness chair, and the hearing is definitely scheduled to end by Dec. 10.

- **Little Uncovered**—The antitrust group has been looking into all phases of GM's corporate activities, but has failed to come up with much evidence indicating possible antitrust violations. All along, the real fireworks were expected from the dealer relationship phase of the probe. And the lead-off witness for the dealers, retired Adm. Frederick J. Bell, lived up to expectations.

- **Charges**—Bell, executive vice-president of the 30,000-member National Automobile Dealers' Assn., said dealer testimony will prove that:

- Manufacturer-dealer contracts are one-sided in favor of the manufacturer.

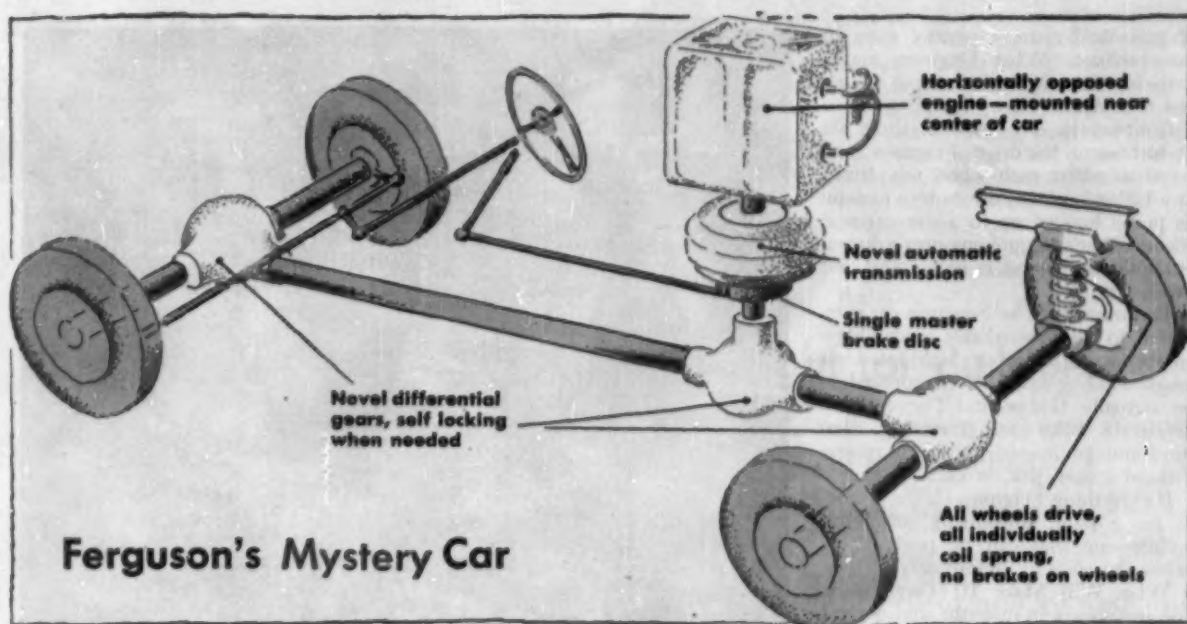
- Franchised car dealers are controlled by Detroit in "virtually every business aspect."

- Dealers are pushed into unwise practices by pressure from auto makers.

Dealers, he said, have been rebuffed repeatedly in efforts to work out fair contract terms, and to win more independence and protection against short-notice cancellations by the factories. This, he charged, shows that auto makers won't take voluntary action to remove dealers from "vassalage."

To back up Bell's charges, individual NADA members spent two days giving their version of pressures used by GM.

- **Coercion**—Earlier, other witnesses spoke of the power of General Motors Acceptance Corp. Holmes Baldridge, former Justice Dept. antitrust, said that until GMAC is divested from GM, franchised GM dealers will be under subtle coercion to use only GMAC financing.



A Bid to Rock the Auto World

The excitement and the cliffhanging that marked autumn this year in Britain seemed ended when Princess Margaret said "No." But now the nation is at it again—this time over new designs that just might revolutionize the world auto industry.

The public does not yet know for sure what the new designs are. Neither does BUSINESS WEEK—and the drawing above is based not on final information but on the best that was available early this week about the recent work of Harry George Ferguson.

• **Out of "Retirement"**—Ferguson is one of the auto world's great innovators. No one was fooled two years ago when he sold out his tractor interests and "retired" to his gardens in the English countryside. Soon the sound of tinkering came from his Cotswold home. And rumors spread that Ferguson, just turned a spry 72, was designing a radical new auto (BW—Sep. 24 '55, p. 158).

Last week, Ferguson was ready to start unveiling his creation—but only a little at a time. Speculation is intense, and virtually every London newspaper has carried "authoritative" stories on the "revolutionary" car. (Mr. Ferguson, remarked the London Economist, is "not without talent or expert assistance for backing into the limelight.")

• **Tests an Influence**—Ferguson has built a dozen or so prototypes of his car. He has driven thousands of miles over British roads, discarded this idea, modified that one. A raft of leading Britons—Prime Minister Eden, the Duke of Edinburgh, a Board of Trade delegation, Winston Churchill, army

chieftains—have seen the car. In an obvious attempt to put a government O.K. on the project, 10 Downing Street authorized Sir Miles Thomas, chairman of the government-owned British Overseas Airways Corp., to sit on the board of Harry Ferguson Research Ltd.

Now all eyes are on the British auto industry. It is busy and booming, but it is also accused of a too-conservative approach to new ideas. What will it do with Ferguson's offerings?

• **A New System**—Essentially, what Ferguson says he has designed is a new, simple, mechanical "motoring system." It's not a new car as such—Ferguson doesn't specify engine or body except to stress lightness and simplicity. Instead, the nub of his creation is an unconventional automatic drive and transmission system. This system is apparently used now on (1) a very small and light military vehicle that could be dropped by parachute; (2) a heavier Jeep-like military vehicle; (3) a civilian Jeep; and (4) a five-seater family car.

These are some of the main points in the Ferguson design:

• **Unsprung weight** is held to an absolute minimum. There's a simple four-wheel suspension based on coil springs—probably without shock absorbers.

• **A flat, possibly four-cylinder, air-cooled engine.** Horsepower would be low, performance high (90 mph.) and economical (35 mi. per gal.).

• **Mechanical brakes—but not on the wheels.**

• **A fully automatic four-wheel drive.**

The drive is the most closely guarded secret. The basic idea illustrated above is found in a patent taken out by a Ferguson engineer in 1953, and just published.

• **How It Works**—The differential found in any car is a complicated arrangement of gears that does a tricky job: The drive-shaft from the motor drives into it; the two axles to the wheels drive out of it. But the axles can drive at different speeds, just so their average rotation equals that of the drive shaft. This is needed because when a car goes around a curve its outside wheels have to turn faster than its inside wheels.

But the conventional differential has a major disadvantage. If one of the wheels gets on slippery ground, it spins rapidly, taking all the movement of the drive shaft, and the car has no traction. Novel feature of the new Ferguson differential seems to be that one wheel can turn faster than the other—to get around curves—but only a little faster. If it tries to spin, the differential lets it have only some of the motion it wants, leaves the rest for the wheel that has traction.

By putting one of these new differentials between each pair of wheels and another between the front and back, the Ferguson car is supposed to distribute the traction evenly among the wheels whatever the road conditions. Similarly, the braking force of the single master brake is distributed evenly to the wheels.

The just-published patent on its system shows a complex and costly system

of gears and cams, expensive even to mass-produce. What Ferguson apparently has done is to work it out simply and cheaply.

Contrary to early reports, there are no turbines in the drive. Ferguson tried a system where each wheel was driven by a turbine, in turn driven by a hydraulic pump hooked up to a conventional engine. That's an auto engineer's dream, but Ferguson found it impractical and expensive.

• **Performance**—The Ferguson car is reported to have remarkable roadability—on ice, across fields, at high speed on rough winding roads. It is supposed to be virtually skid-proof. The car will decelerate fast, come smoothly to a stop, and go immediately into reverse without a skid, jerk, or click.

If everything Ferguson claims is true, he has a light, convenient, safe automobile—one that can be made at or below the costs of present cars.

• **Who Will Make It?**—Ferguson is first and always an inventor, and doesn't want to get involved in organizing production. Nor does he want to make a lot of money—he has made it, and death duties will take most of it away. He does want every man to have a high quality car, and he would like to be the man responsible for putting Britain on top in world auto making. That doesn't mean he won't look overseas—just as he did to the U.S. with his tractor—if it becomes necessary. And Ferguson doesn't seem interested in exclusive licensing.

He claims there is substantial financial backing in the City of London to set up a new company. But a new company is not likely. As for present British auto companies, there are plenty of reasons why some might, and others might not, take on and produce the Ferguson creation. In the final analysis, however, the likeliest candidate is British Motors Corp., world's fourth largest automaker (BW—Jul.16'55,p120).

BMC is said to be actively considering the Ferguson proposition, even though it has its own new car on the drawing board. What BMC, or any other auto maker, will do is all guesswork now. It is especially hard to predict what will happen when two difficult, peppery gentlemen like Harry Ferguson and Leonard Lord, boss of BMC, get down to cases.

Meanwhile, all of Britain is giving its auto makers advice. The annual motor show in London got a bad press, and there are constant rumblings that there's nothing new in British autodom but the paint (BW—Oct.29'55,p147).

So the question of the Ferguson car's future boils down to this: Are Britain's big auto makers uneasy enough about the future of their current designs to look seriously at his car? Right now it looks as if the answer to that is "Yes."



New York Acts on Laws Attacking Worst Slums

Even from high up (picture), the old tenement neighborhoods of New York seem pitiful—and dangerous—places for people to live. Jammed together, badly kept, and horribly overcrowded, they are sores on the city.

Last week, in what it called "the most far-reaching program of housing reform ever proposed" locally, the city's administration took a bold step toward curing some of those sores and preventing new ones. After nearly 100 public hearings, it pushed through the City Council a set of six new housing laws.

• **Strict Rules**—Three of them, making up the first multiple-dwelling code of its own the city has ever had, set up strict standards against overcrowding, require central heating and hot water in all buildings, and slap criminal penalties on violators.

The other three laws ban the deadly kerosene room heaters, reorganize the Dept. of Housing & Buildings to centralize and tighten up authority, and provide tax help for landlords to make required improvements. All must get

the approval of the Board of Estimate and Mayor Robert F. Wagner before they take effect, but the laws are expected to be in force on Jan. 1.

• **Not Really New**—In what New York is doing, it is in no sense breaking through to unexplored ground. Other cities, notably Milwaukee and Baltimore, have already matched or outdone the new laws' provisions. Nevertheless, the New York code is significant—because of the impetus it is certain to give to code improvement in other cities.

Up to now, New York's multiple dwellings—any residential building other than a one- or two-family house—have been regulated by a 1929 state law that applies only to New York and Buffalo. There has been no city code.

In its earlier forms, dating back to 1901, the state law was a pioneer, and it set the pattern for much of the tenement legislation of other states and cities. But to New York City's mayors, it has long been inadequate—particularly when it came to dealing with the

overcrowding of the "old-law" tenements built before 1901. More than 50,000 of these tenements are still standing, and they house close to 20% of the city's population.

For years, city administrations have railed against Albany for not amending the state law to give them more enforcement power and higher standards to work with. But in the clash between the Republican-controlled legislature and the Democratic-controlled city, little got done.

• **Do It Yourself**—Wagner, who took office in 1954, changed this. He simply stopped trying to get anywhere with Albany. Instead, he drew up his own program to supplement the state law and now intends to get it on the city books before the legislature can preempt it. Specifically, this is what it does:

- Sets close limits now on the number of people who can legally occupy an apartment. Later, all buildings will have to comply with a square-foot occupancy formula, rather than the more lenient cubic-foot standard now in effect. It will be a criminal offense—for both the landlord and the tenant—to allow overcrowding.

- Orders central heating and hot water plants in all multiple-dwelling units by Nov. 1, 1959.

- Outlaws kerosene heaters and other hazardous heating appliances by the same date. (Wagner indicated last week this deadline might be moved up, after three children died in a Thanksgiving kerosene fire.)

- Enables owners of cold-water buildings to amortize 75% of the cost of required improvements through tax reductions. Taxes on the property will be reduced each year for a period of nine years by 84% of the cost of improvements. On top of this, the increase in assessed value of the property is exempt from taxation for a period of 12 years.

- **Hope for Effects**—Taken as a whole, these laws, most experts feel, can be effective in getting rid of some of the worst aspects of the slums—even though they won't stamp out the slums themselves. The program, however, is not without criticism—both from landlords who fought it because they thought it went too far and from other people who thought that it didn't go far enough.

But the general feeling is that it adds up to a solid achievement—Wagner's greatest single accomplishment, the New York Times called it—for both the administration and the new office of city administrator.

- **City Administrator**—The post of city administrator—whose sole occupant so far has been management expert Luther Gulick—has been in existence only since 1954. It was set up after a

lengthy study of city government, headed by Gulick, as a means of applying professional management skills to city operations—while still bowing to the political need for a strong mayor. In many ways, it is a compromise on the city-manager form of government and, as such, it is being watched closely by other big cities where all-out professional government is a political impossibility.

Gulick can only recommend to the mayor. But he has a wide field to op-

erate in, has power to make continuous studies of the work of all agencies, establish management standards, and analyze and report to the mayor on impending policy decisions.

Gulick's assistant, Charles F. Preusse, was chief author and main trouble-shooter on the code. Preusse is now slated to take over the \$30,000-a-year administrator's post when Gulick goes back to directing the Institute of Public Administration around the first of the year.

Little Relief in Sight for Builders

Government officials tell housing experts stringent policy on mortgage money will be continued.

Private housing experts went to Washington this week to tell Sen. John Sparkman (D-Ala.), chairman of the Senate subcommittee on housing, that their industry was in pain. After two days of hearings, they went away convinced that even more troubles lay ahead despite a promised relaxation of borrowing rules for savings and loan associations.

Their chief complaint was that the Federal Reserve Board's policy of credit stringency is hitting housing particularly hard—increasing the cost of financing new homes and endangering the industry's prospects for next year.

- **Bad News**—Government officials had little but bad news for them on this score. William McC. Martin, Jr., chairman of the Federal Reserve Board, made it plain that current policies—aimed at checking inflation—would be maintained even if it meant further increases in the cost of money. Martin was strongly supported by W. Randolph Burgess, Under Secretary of the Treasury.

Both Martin and Burgess told the panel of housing industry experts that the most serious shortage facing the housing industry was not credit, but materials. Martin said wholesale prices of building materials have risen further and faster than other prices. He added that the construction industry seems close to capacity.

The panelists concluded from this that—unless there is an unforeseen slackening of general business—interest rates on conventional mortgages would rise and discounts would increase on fixed-interest mortgages guaranteed by the government.

- **Disagreement**—On practically every other key question raised at the hearings, industry spokesmen disagreed sharply among themselves or with government spokesmen:

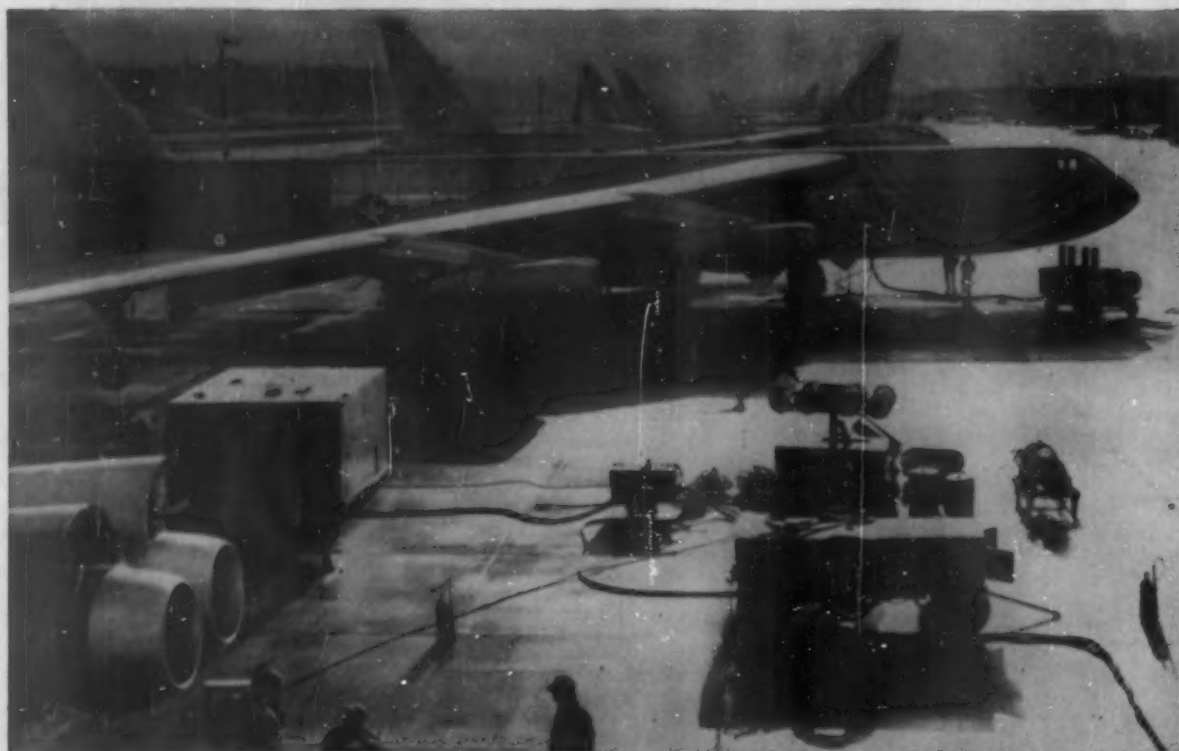
- Government officials thought increases in materials costs were pushing up the price of houses. But William

Levitt, builder of projects bearing his name in New York and Pennsylvania, said rising land and interest costs were causing the higher prices.

- Government spokesmen insisted the home building industry was in good shape and doing all the business it could without endangering the rest of the economy. Levitt said conditions have been "bad—very bad" for the past 60 days.

- Government spokesmen think 1956 will be a lively year, though somewhat under the new-starts rate for 1955 as a whole. Albert M. Cole, Administrator of the Housing and Home Finance Agency, said he thought 1.2-million or 1.3-million starts (about the current level) seemed reasonable for 1956. And he said he would fight for this number if it became necessary. But industry spokesmen thought a continuation of present policies would result in a sharp drop next year. Levitt cited a study of 500 contracts recently signed by his firm for new houses; 30% would fail to qualify for FHA financing under regulations now in effect. One industry spokesman privately is telling government officials that new starts could drop to 800,000 or 900,000 next year unless regulations are eased.

- **Slight Relief Due**—There was one bit of cheerful news for panel members. Walter W. McAllister, chairman of the Federal Home Loan Bank Board, said restrictions on savings and loan associations would be eased somewhat. Since September, associations have not been allowed to raise funds for loans by borrowing from the Home Loan Bank system of regional banks. Sometime after the first of the year, they will be allowed to resume this practice on a limited scale. But McAllister made it plain this would not affect the Administration's over-all credit policy: Savings and loan associations would have to pay whatever the market required by way of interest, and so would the home buyer.



FOR THE 30-DAY WAR we'll speed up production of long-range bombers (B-52 above) for retaliatory attacks, and . . .

New Defense Plan for Atom Wars

The Eisenhower Administration has adopted a new strategic defense plan that makes the biggest break with the past since the "broad-base mobilization" concept of five years ago. Instead of choosing between air power and surface power—the crux of long rivalry among the services—it chooses between weapons in being and productive capacity held in reserve.

The choice is this: to keep weapons of all kinds up to the highest standards of readiness for their special tasks (pictures). It shifts stress to preparedness for a quick nuclear war, takes it away from industrial reserves for use after M-Day.

• **The Switch**—Ever since Korea, our basic plan has been to prepare our military and industrial forces for a war of three to five years' duration.

Now, the Defense Dept., the National Security Council, and the Administration are basing all their thinking on what is called the Joint Mid-Range Strategic Plan.

The new plan is a compromise between those who believe the next war will be decided with nuclear weapons within 30 days and those who believe

that, even with nuclear weapons, we must still prepare for the long-fought war of some years' duration.

As one top Washington official describes it: "Regardless of service interplay, top Defense Dept. officials now believe a new war would be decided quickly with nuclear weapons. There would be no time in which to activate reserve industrial capacity. The decision would be made by our forces and equipment in being."

• **Tipping the Scales**—The plan is aimed at resolving the below-the-surface squabble between (1) the Air Force and the Navy, which contend that a future war would be short because of the fantastic destructive capability of new airborne nuclear weapons, and (2) the Army, which argues that the new weapons have not necessarily reduced the time element in warfare.

The new plan's detailed contents, of course, are top-secret. But its general idea is known. While it does not lay down any exact edict on the nature or length of a future war, it does point up the prospect that the "major impact" of a next war will be at the start.

• **Military Budget**—A Defense Dept.

official calls the new plan "an agreed vehicle on which budget planning and peacetime financing will be based." Its impact will show in the budget to be submitted to Congress in January. This budget will show:

- More emphasis on procurement of the weapons and equipment that would be needed in the initial phases of a future war, and

- Less emphasis on spending for items that would be needed mostly during the tail-end of a future war or for keeping a broad base of production lines ready to produce in quantity.

I. Procurement Shift

Flowing from the new policy will be a step-up in research and development on new weapons and a speedier transition from prototypes to heavy volume production. Presumably, there won't be much effect on the total amount of procurement. But there will be accelerated replacement in equipment that's becoming obsolete and a slow-down on stockpiling of vehicles, small arms, field communication gear, and other conventional equipment.



FOR THE KOREA-TYPE WAR we'll keep tanks, other ground weapons up to date. That's the principle of a . . .

or for "Brush Fires"

Says one official: "Under the new concept, the minute something better [in weapons] comes up, I expect that we will immediately replace what we have, regardless of the cost of what we throw away. This must be so if we assume that another war will be decided by the equipment we start out with."

• **Already in Action**—Actually, the new policy is already apparent in at least three recent Pentagon decisions:

• This summer, the Air Force awarded special "Phase One" contracts to North American Aviation, Northrop, and Lockheed to design new long-range interceptor planes and to Republic Aircraft and North American for fighter-bombers. Purpose of the special contracts is to speed up research and development time by eliminating the time-consuming preliminary design study contracts that ordinarily start off a new plane development. These five special contracts cover preliminary design through mockup.

• The Air Force was allowed to increase production of B-52 bombers and F-101 and F-104 fighters by as much as 35%, to speed up the replacement of slower and less formidable

aircraft now in operation. The Air Force was also permitted to put the Falcon guided missile into large-scale production before completion of field evaluation tests.

• With the new plan's emphasis on forces in being, the Army was ordered to deactivate 358 reserve companies and to convert 15 undermanned reserve infantry and armored divisions into noncombat units. At the same time, the Army was directed to hold down its equipment reserves to a six-month supply.

II. Machine Tools

The latest tip-off on the new short-war mobilization policy will be in a Defense Dept. directive that's now in the works. It will revamp military programs related to machine tools and other production equipment—mainly by scrapping the so-called Vance Plan to stockpile at least \$200-million worth of machine tools to be put into arms production after an M-Day.

As the plan was first set up, the services were to buy machine tools for future production of new weapons. The

tools were to be stored in the plants of tool builders or the military contractors who would make the weapons. For reasons of budget and other considerations, the scheme has never really gotten started. In three years, only \$22-million worth of orders have been placed—and these came in the last six months or so.

• **Revised Scheme**—Right now, there's a freeze on new tool orders to be placed out of the \$100-million fund appropriated for the 1954-55 fiscal year. Some \$50-million worth of contracts were about to be let by the Air Force when the freeze was imposed several weeks ago. Moreover, the Defense Dept. has made no move to allocate to the three services an additional \$100-million that was voted for 1955-56.

Officials hint that the upcoming directive will upset the plan to create standby arms capacity. It may let the services put the \$22-million worth of reserve tools ordered earlier this year into current production when delivery is made. The directive is also expected to give the Air Force a green light to place the \$50-million worth of tool orders now suspended. But the equipment will be used to speed up B-52, F-101, and F-104 output, rather than go into storage for standby use.

Another provision in the directive will probably allow the freer use of idle

military-owned machine tools now in mothballs. Even more significantly, the directive is expected to cancel some \$128-million still uncommitted for machine tool procurement.

• **Phantom Orders**—One other impact of the new emphasis on planning for a short war: The Defense Dept. is drafting important changes in its production allocation program.

Under this program, about 24,000 plants are now lined up to produce some 4,000 military weapons, equipment, and components in case of full mobilization. These plants hold so-called "phantom orders" for specific types and quantities of military goods. These would theoretically become effective about two months after a future M-Day.

In case of a brief and catastrophic nuclear war, as envisioned in the new defense strategy, the detailed production allocation plans would get into operation too slowly, many officials think. So the program is being revised to reflect the latest mobilization policy.

First, the planners are trying to figure out some kind of "self-triggering" action to make the top-priority phantom orders effective immediately after the start of a future war. They also want to screen the orders periodically to remove proposed production schedules for outmoded equipment—such as artillery and ammunition that are being replaced by guided missiles. They are also likely to weed out mobilization plans for other military items that the short-war strategists consider marginal.

III. Pervasive Effect

The Joint Mid-Range Strategic Plan is not a whole-hog type of program. You won't see its consequences quickly—and when you do, they may not be immediately identifiable as a product of the new defense thinking.

The new thinking will eventually influence most government programs tied to defense preparedness—industrial capacity, manpower, military procurement, raw materials stockpiling, and perhaps even foreign trade. (In recent months, for example, some domestic industries have used the issue of defense essentiality as a gimmick to try to curb foreign competition.)

• **Nothing Radical**—But since the new plan is mostly a matter of emphasis, you'll see few if any sudden and radical changes in existing government programs. For instance, no one in Washington is talking about dismantling stockpiles and reserve industrial facilities. It all boils down to this: There'll be no expansion of reserve capacity, yet no dissipation of what we have now.

Says one advocate of the new policy: "An idle aircraft engine plant that cost \$50-million to build can be kept in

place for only \$500,000 a year—1% is good, cheap insurance."

The insurance he talks about is against the risk that a future war is either a long war patterned after earlier global conflicts or a limited "brush-fire" war like Korea. Not even the most fanatical short-war strategist can rule out these possibilities.

• **Maybe No A-Bombs**—Indeed, there are many high Washington officials who still rule out the possibility of a short nuclear holocaust. They foresee an "atomic stalemate." One of them explains it like this:

"We fought for five years in World War II without getting into chemical or bacteriological warfare—something both the Nazis and ourselves knew plenty about—because of the fear of the other side's using it. Isn't it possible that in a new war, with both contestants capable of using H-bombs and A-bombs, that nuclear weapons will not be used because of the virtual certainty of retaliation?"

This official—and others like him—argue that the doctrine of planning for a short war is dangerous. They say that mobilization policy must be planned to cover all eventualities, that you can't risk security on only one assumption—that a future war will last only 30 days or so.

The architects of the new strategic plan say it does not rule out the possibility of new wars along the line of World War II and Korea—even though the emphasis is put on short-war planning. They contend that the new plan still leaves us better prepared for such conflicts than we were in 1941 or 1950.

To control the initial stages of any new "brush-fire" type of war, there will still be adequate conventional forces and equipment on hand—ground troops and tactical air power. For the later stages of such a war, there will be time enough to mobilize the manpower reserves, arms capacity, and industrial stockpiles originally built up on the premise of a long war.

• **Fight Coming Up**—Although the long-war vs. short-war issue is presumably resolved in the new Joint Mid-Range Plan, there is still considerable intramural government skirmishing over it. The new emphasis in mobilization planning will pinch some sensitive spots in bureaucratic Washington and in certain industries.

In January, when the 1957 fiscal year military budget goes up to Congress, it's almost certain that the shift in U.S. defense thinking will become a political issue—maybe as fiery as the Eisenhower Administration's military New Look of two years ago. Already, the new policy is being denounced as part of a Republican plot to cut spending just to balance the budget by election time.

Peace at Last

UAW workers, in close vote, O.K. contract ending long and violent strike at Perfect Circle Corp.

The United Auto Workers (CIO) this week voted, by a narrow margin, to accept a new contract with Perfect Circle Corp. for its New Castle (Ind.) foundry. The agreement ended a bitter and at times violent four-month walk-out.

Union-management negotiations covering the New Castle foundry turned serious after Perfect Circle employees at three other plants voted recently to oust UAW as bargaining agent (BW—Nov. 19'55, p168). With federal mediators sitting in, the auto union and the piston ring manufacturer worked out settlement terms last weekend. To ease outside pressures, meetings were held in Chicago.

• **Best Possible**—Emil Mazey, UAW secretary-treasurer from Detroit, told members of the striking local that the terms were short of what UAW wanted—but were the best the union could do under the circumstances.

According to Perfect Circle, the new pact runs to July 1, 1957. It includes a 10¢-an-hour pay raise put into effect by the company in July, when the foundry reopened to nonstrikers after UAW walked out, and an additional 7¢ raise payable next July 1. The contract can be reopened once on wages between July 1, 1956, and the termination date a year later if the government's cost-of-living index goes up.

UAW demanded both a full union shop and compulsory arbitration; it lost on both demands. Maintenance-of-membership and voluntary arbitration clauses included in the old contract will be continued. UAW also failed to win a supplementary unemployment compensation clause similar to those in other auto manufacturing and parts contracts.

• **Firings**—A final agreement was delayed by UAW insistence that Perfect Circle take back 37 strikers discharged for alleged illegal acts during the walk-out. In a compromise, the corporation took 22 strikers back without any penalty, agreed to restore jobs of eight others after a 30-day suspension beginning the day the strike ended, and agreed to arbitrate the cases of the seven others.

When the agreement was reached, a force of 95 National Guard troops was still on duty at the New Castle plant. The patrol had been maintained since an Oct. 5 outbreak in which eight strikers and nonstrikers were wounded.



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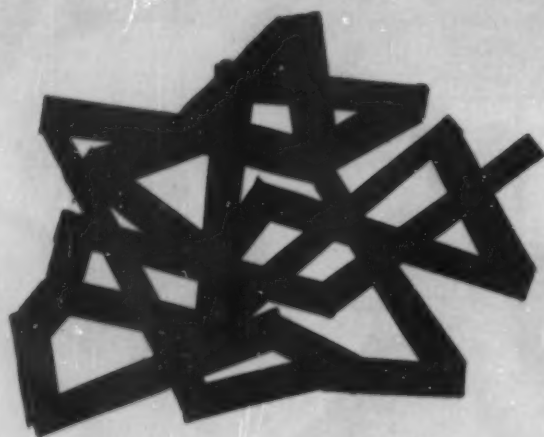
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BUSINESS BRIEFS

Swarms of new stockholders are needed to satisfy U. S. business' vast appetite for capital, says Philip D. Reed, chairman of General Electric. Reed thinks 40-million to 50-million investors could fill the bill; today there are between 6-million and 7-million.

National Tea Co., Midwest grocery chain, has passed to the control of a group headed by W. Garfield Weston, chairman of a Canadian bakery chain. The Weston group got control by buying stock—an estimated 340,000 shares out of 2.1-million outstanding—from John F. Cuneo and Robert V. Rasmussen, National Tea directors.

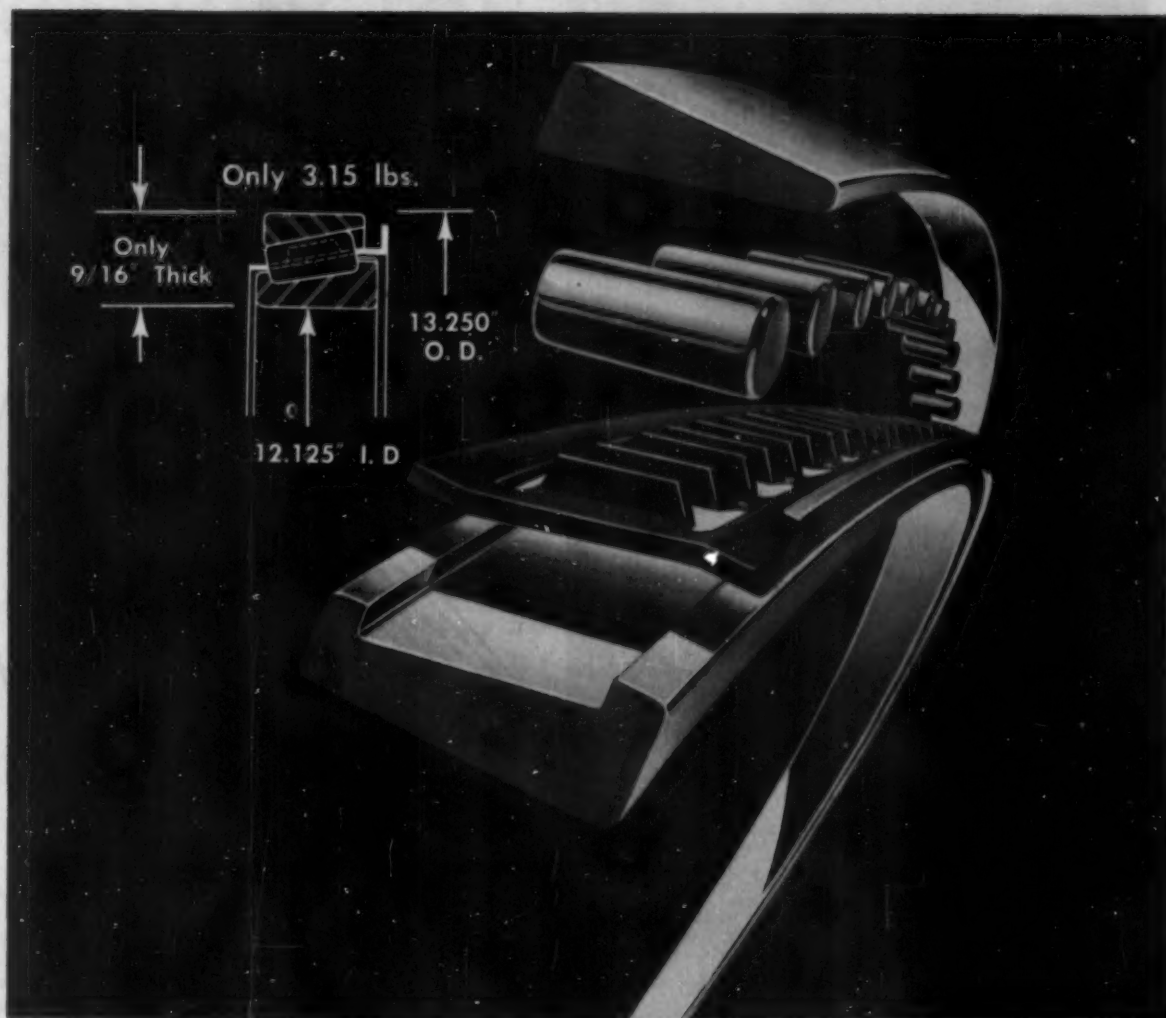
Up in smoke: Cigarette shipments in September rose a shade over the year-before period—32.1-billion against 32-billion—according to Internal Revenue Service figures. Actual production of cigarettes for the month was 34.9-billion, down 800-million from the year before.

Block that sale! Bohn Aluminum & Brass Corp. is offering \$25 a share for 50,000 shares of Diamond T Car Motor Co. Bohn, which already owns 12% of Diamond T, is trying to block sale of assets of the motor company to White Motor Co. for \$8.6-million-plus. Bohn says the price is too low and the deal does not protect Diamond T stockholders.

Stop that merger! The Justice Dept. has moved to block the proposed absorption of G. R. Kinney Co. by Brown Shoe Co. The department says adding the 360 Kinney shoe stores to the vast Brown network would greatly reduce competition.

Economic soothsaying from here and there: Business activity will stay high for the rest of the year, says a survey by the National Assn. of Purchasing Agents. . . . The fourth quarter looks equally rosy to the Commerce Dept., which counts on consumer demand and business spending to supply the pressure. . . . Farmers will be squeezed tighter next year in the cost-price pincers, according to Agriculture Dept. experts.

British buna on the way, 50,000 annual tons of it, to be made by the new International Synthetic Rubber Co. Major shareholder is Dunlop Rubber Co.; others in the deal are subsidiaries of Goodyear and Firestone, and France's Michelin. Shortages and the high cost of natural make the move a must for Britain (BW—Nov. 26 '55, p186).



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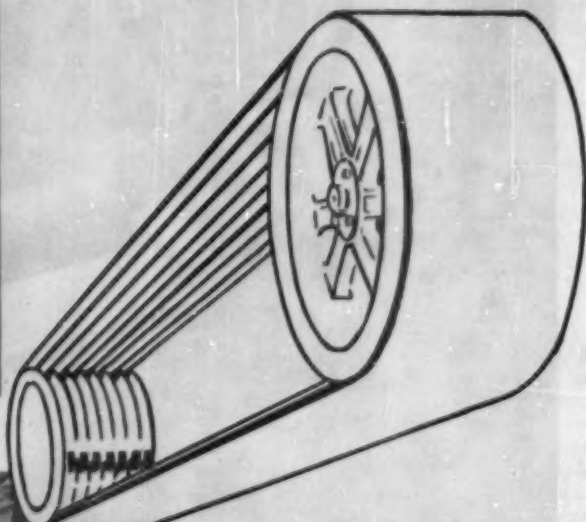
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
DEC. 3, 1955

A BUSINESS WEEK

SERVICE

Pressure on Pres. Eisenhower to run again is on the rise. There is no parade of politicians to Gettysburg pushing for a second-term try. The fact is GOP leaders lean over backward in their efforts to leave the President free to make up his own mind. Still, there is an indirect buildup, which Eisenhower will find hard to brush aside when he makes the decision.

Take Leonard Hall's visit this week. The GOP chairman had his first session with the President since the Denver attack. He talked politics—party strengths and weaknesses, the issues for next year. He didn't seek a 1956 commitment, and he didn't get one, either. But after 45 minutes, he came out and gave it as his opinion that Eisenhower will run next year, "if he is able." Party plans assume he'll make the race. That's pressure.

Then, there's the mail. The tens of thousands of get-well messages haven't been tabulated in detail. But a common theme is that the leadership of Eisenhower cannot be spared. That, too, is pressure.

Then, there's the Democratic left wing. More and more, it is going all-out in attacks on Eisenhower policies. This can get the President's dander up, and that's something "moderation" advocates want to avoid.

As to Eisenhower's own plans, there's still no word. Gettysburg visitors are pressed by reporters for clues. So far, no one claims to know anything. The impression is that it may be another 60 days, or even longer, before the President makes his decision. Doctors figure it will be late in January or even in February before they can forecast his future health. The assumption is he will wait until the doctors turn in their verdict before giving his. Until then, the many stories on what he will or won't do should be treated as speculation. Meantime, odds against a second-term race are high.

Campaign plans are going ahead. The Eisenhower record and the proposals that Eisenhower will make in his January messages to Congress will be the GOP platform for next year, no matter who heads the ticket. The problem is that if Eisenhower doesn't run, his successor candidate will start late.

Nixon remains in the strongest position during the time of uncertainty. But he can make no move until the word is passed. He will need a nod from the President in order to make the grade.

Warren remains high in speculation. The name of the Chief Justice is pushed by those who feel Nixon is "too young" and "can't win."

There are others in the picture, too. Former Gov. Dewey of New York is often mentioned. There are Sen. Knowland and Gov. Knight, both rivals of Nixon in California politics. But all are for Eisenhower—if he will make the race.

On the Democratic side, heat's building up. It's the same old split between the right and left, with the right having the advantage now.

Attacks on Stevenson, the front runner, are becoming more and more vocal. They are aimed at his "moderation" stand.

Harriman continues his sniping, egged on by labor union leaders and New and Fair Deal intellectuals, who feel pushed to the sideline.

"Sespy" Williams is picking it up. The aggressive Michigan governor

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
DEC. 3, 1955

lines up with Harriman in attacking Stevenson. Williams won't be a serious contender for the Democratic nomination next year. But he is making plans for a later try at the White House, probably in 1960.

The Rayburn-Johnson axis in Texas is strong. These Democratic chiefs of the House and Senate are sold on "moderation" as their 1956 theme. In fact, they originated it, before Stevenson took it up. They long have felt that the Democratic chances of winning in 1956 depended on Eisenhower's being out. They felt that way months before the heart attack (BW—Jul. 2 '55, p37). Their strategy was to play up Democratic responsibility, with the idea that when Eisenhower made up his mind on 1956 he would be convinced that even if control of Washington shifted, his policies would not be junked. The carping from the Democratic left annoys Rayburn and Johnson. It runs against their strategy.

There's lot of political unhappiness in the South, much of it tied in directly with the desegregation issue. But the figuring is that the GOP will get fewer votes in Dixie next year than in 1952, whether Eisenhower heads the ticket or not.

Stevenson has considerable support among governors and can count on a lot of delegate strength if he's able to soft-pedal the race issue.

The issue of business influence in Washington will be worked harder and harder by the Democrats as the Presidential election nears.

Eisenhower's new order on conflict of interests won't quiet the row (see page 68). In fact, Democrats tag it as "too little and too late."

Old cases will be kept alive and the hunt will go on for fresh ones. Three resignations will be played up hard: Air Force Secy. Talbott, Public Buildings Commissioner Strobel, and Interstate Commerce Commission Chmn. Cross (a Truman appointee). And there's the handling of the canceled Dixon-Yates contract.

Eisenhower will address the AFL-CIO merger convention. He won't appear in person, of course. It will be a live telephoned transmission. It's significant that the performance will be put on as a result of a special trip to Gettysburg by Labor Secy. Mitchell. The Cabinet member for labor is sensitive to charges that the Administration is anti-union and sees this as a chance for Eisenhower to bid for rank-and-file support for the GOP.

A more liberal school aid program is forecast in Eisenhower's message to this week's big White House conference on education.

Federal grants for construction will be included for states that can't raise necessary money. These will be in addition to loans.

But legislative action still is doubtful. The integration issue blocked legislation this year and it may do the same thing next year.

Political attacks on credit tightening are coming. Congressional hearings now on Administration anti-inflation moves will set the stage.

There's irritation between the Treasury and Federal Reserve Board. It isn't serious, as yet. But the Treasury does complain that the board gave the credit brake its latest push just ahead of the current refinancing. It would have preferred an earlier move, with time for the money market to settle before the offering.

Fortune

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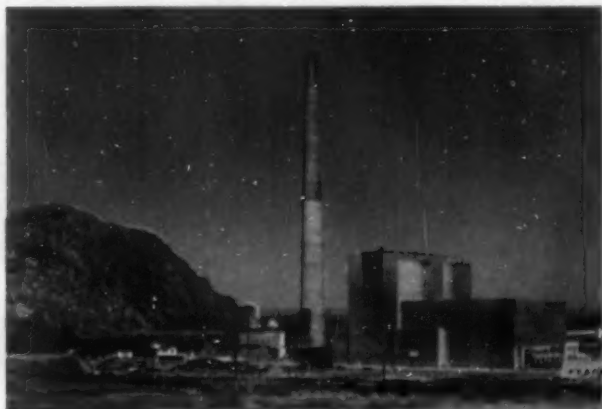
"Can Power Plants Be Beautiful?"

... April, 1955, p. 62

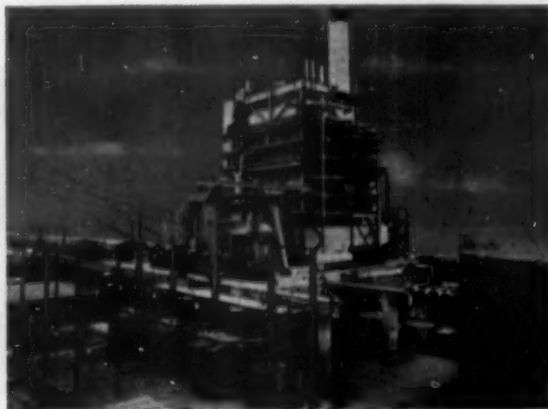
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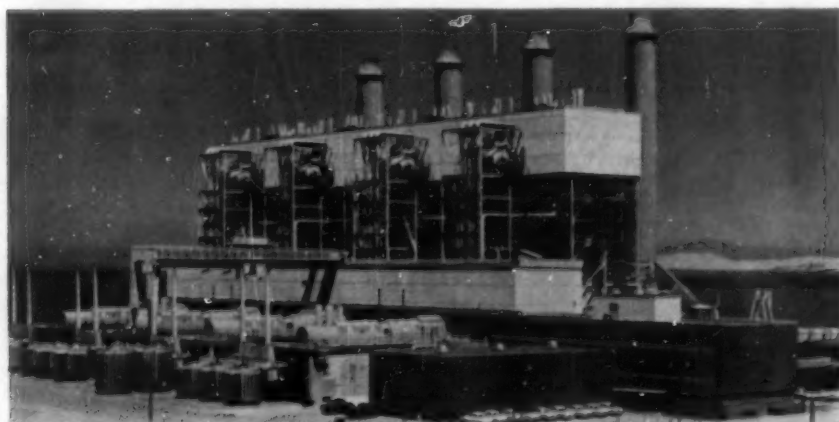
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Utah Power & Light Co.



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Labor's Merger: What It Means



George Meany (AFL)

As representatives from every one of the 145 AFL and CIO unions poured into New York this week, the last vestige of doubt that a 20-year schism in American labor was about to end was wiped away. Those who had most strenuously dissented from the terms of the merger—groups led in the AFL by the printers and plumbers, and in the CIO by the transport workers—readily admitted that their opposition had attracted only a very small minority.

On the other hand, the AFL's George Meany and the CIO's Walter Reuther (pictures), working assiduously in the last few months, have succeeded in giving most of the delegates a feeling that they are participating in an historic event.

This, even more than logical argument, will account for the excitement and enthusiasm of the three scheduled meetings: the separate "windup" conventions of the AFL and CIO that began this midweek, then a joint convention opening Dec. 5 in which the AFL and CIO will become one body, meticulously named AFL & CIO.

• **Rivalry as Usual**—By Dec. 9, all business will be finished and a bitter conflict ended. But peace will not envelop the house of labor.

The AFL and the CIO, and the combine that will emerge, are delegate bodies once, twice, and often three times removed from the basic business of unionism.

This business consists of recruiting wage earners into organized groups, representing them with their employers through negotiations and/or strikes, and administering and policing the contracts that come out of that representation. Everything else is frosting on the cake; necessary frosting, perhaps,

and a natural extension of the basic job, but overlaid onto it.

• **Top Level**—Practically all of the basic business of organizing, negotiating, striking, and contract administration is conducted by the international unions (so called because they operate in both the U.S. and Canada) and their local branches.

A fairly typical example of how this works would be a local of the teamsters' union in New Orleans that pulls cargo to and from the docks and gets interested in a waterfront lumberyard. With or without help from the teamsters' international, the local's members and officers would approach the lumberyard employees to persuade them to sign up with the teamsters. They would be taken into the drivers' local, perhaps as a separate division. The AFL, to which the parent international belongs, would have nothing to do with all this, nor with the lumberyard workers' subsequent relations as an organized group with their employer.

• **New Fields**—Another common form of conducting this basic union business is for an international, the auto workers as an example, to send out a team of organizers from headquarters to work a new field—it might be a new aircraft parts plant coming into operation in the Northwest. The organizers will establish a new local union, get it started with its first contract, then leave it to run its own affairs. Again, the CIO, to which the auto workers' international adheres, has nothing to do with the undertaking.

In comparatively rare cases, the AFL and CIO will itself do the organizing with its own crews. But as soon as a group is organized, it is turned over to the international that claims jurisdiction in its field.

Only in some unusual industrial or occupational area where no international has a claim will the organized



Walter Reuther (CIO)

workers stay directly affiliated to the AFL or CIO.

• **A Pacifying Influence**—The competition that has enlivened and bedeviled the union movement goes on between the local and international units. Merging the AFL and CIO will not eliminate it. Meany and Reuther and the others who pushed through the amalgamation are hopeful, however, that it can be minimized. They look for this to come not from a new sweetness and light within the merged group but from a strengthening of the delegate body's authority, written into the new AFL & CIO constitution.

As the forum of the international unions, the AFL and CIO have had two traditional functions: issuing charters and apportioning jurisdiction. A charter licenses an international union to organize and operate in a stated jurisdiction, as for example the steel industry or the bricklayers trade. It carries exclusive, if unenforceable, rights.

• **Jurisdictions**—Apportioning jurisdiction is a function derivative from the issuing of a charter. If two internationals—say the brewery workers with a charter covering all who work in and around breweries and the teamsters with a charter covering truck drivers—row over which union gets beer truck drivers, the forum of the internationals must adjudicate.

If an international doesn't like the decision on jurisdiction, it is free to withdraw from the federation. The carpenters have withdrawn more than once from the AFL, as have the machinists. John L. Lewis took his mineworkers out, although not on a jurisdictional fight, and has never come back.

• **Power to Penalize**—Theoretically,



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the unions that remain in the federation are free to dismember the independent organization, but they rarely have the strength to do it when it is an AFL fight.

The CIO unions have been more successful in devouring the internationals they kicked out for being Communist-dominated.

Both AFL and CIO have had the right to expel unruly affiliates. The constitution of the merged group will strengthen and make more summary the expulsion weapon. Those who have the highest hope for the merger as a source of internal peace and harmony count on the power of expulsion to achieve it. It is also the more centralized authority, necessary to permit the merged group to exercise its power, that makes some union officials less than happy about the merger.

• **Unity**—Beyond making AFL & CIO more forceful in dealing with its affiliates than the two organizations it supplants, unity will mean:

• More concerted labor political action—particularly behind the Democrats. However, fears of a union political domination appear unfounded. Labor will probably have less money than its goal of \$15-million in its political war chest, and muster few if any more votes through the merged federations than while AFL and CIO were separate.

• A stronger and centralized labor voice on all public issues. Presumably, AFL & CIO will speak in the future for 15-million unionists—one strong statement of policy for all. But with a few exceptions AFL and CIO in the past have spoken separately—or jointly—for basically the same domestic policies.

• A unified program abroad. In the past, AFL and CIO international activities have been hampered by a lack of coordination and an inability to see eye-to-eye on many issues. American labor's efforts to "sell" its system abroad have been hurt by this. Presumably, this situation will now be cleared up. But doing it will require a reconciliation of key foreign representatives of AFL and CIO, and this might not be quickly or easily achieved.

• More intensive organizing efforts and fewer feuds. Already, union activities have been stepped up (page 54). Serious drives can be expected—not immediately but beginning during 1956.

Just how much will be gained in these directions will be determined only after a year or more. Those closest to the merger see the period before the next AFL & CIO convention late in 1957 as a honeymoon that could make or break the marriage of two parties that have different ways of life but a determination to live together comfortably and successfully. **END**



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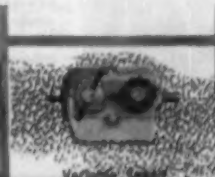
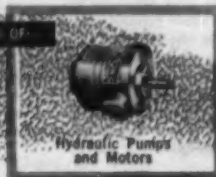
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The Labor Vote

Survey of auto workers shows that most—but far from all—tend to follow the line laid down by the union.

How the union member votes in the privacy of the election booth is a question that can start an argument any time in labor, management, or political circles. Particularly now that AFL and CIO are merging (page 41) there is speculation about the "labor bloc" and the possible "delivery" of the labor vote. Just how substantial is it?

The United Auto Workers (CIO) was as interested as anyone in the answer to that after the 1952 election. It offered Detroit's Wayne University a \$10,000 grant to see just how Detroit auto workers voted—and what motivated them. Wayne accepted the money with the understanding that its researchers could develop their own questions and place them before auto workers in such a way that UAW membership would not (theoretically) influence answers.


• **Preview**—The study has been directed by the psychologist, Dr. Arthur Kornhauser, with the aid of two sociology professors, Dr. Albert J. Mayer and Dr. Harold L. Sheppard. The final report will be published early in January, but a summary released last week is already giving plenty of food for thought to labor and management and politicians.

Over-all, the study found this: "UAW (CIO) members are predominantly loyal to the union's political endeavors." Some may deviate from time to time from union political lines—as happened in the Detroit area in 1952, when many workers with Democratic leanings voted for Pres. Eisenhower because of his personal appeal. But, the survey says, most do not.

• **Views Remain**—Equally significant to the Wayne researchers, the report indicates that wage-earners can make great social and economic gains and still remain steadfastly union-oriented. The survey results noted that apparently "existing trends toward increasing skill levels, higher income, greater education, and diminishing numbers coming from farm and foreign backgrounds do not pull workers away from union political interests and affiliations as is often alleged."

• **The Details**—Otherwise, the researchers reported:

• They said that they consider television their best source of political information; although they said they got "most" from newspapers, they said they did not trust such information. Leaflets and mailed literature were rated "ex-



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General Electric's Major Appliance Division in Louisville, Ky., has five product manufacturing buildings, a warehouse and service buildings—over 4 million sq. ft. under roof. To generate all steam necessary for process work and heating requirements of this vast area, GE's power plant burns coal the modern way. Coal was chosen for two reasons. One, a careful fuel cost study disclosed that, on a straight economic basis, coal would give GE the lowest cost steam generation of all fuels. Second, availability of supply was considered and again coal won over other fuels. In addition, full mechanization of GE's power plant has facilitated all details of coal handling and ash removal while completely eliminating any possibility of air pollution.

For further information or additional case histories showing how other plants have saved money burning coal, write to the address below.

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tremely low in influence and value" by Wayne's researchers.

- Although 55% of the workers polled thought labor should have a greater voice in government, 14% thought they should have less.

- Despite UAW's intensive and vigorous campaigning in 1952, the individual auto worker's personal involvement—and interest—in political action was "only moderate."

- While UAW—and labor—is strongly pro-Democratic, only a bit over half of the auto workers polled could find important differences between the Democratic and Republican Parties.

- Labor politicians face a problem

of overcoming feelings of political impotence, futility, and skepticism over an individual worker's voting importance; one-third of those polled agreed with a statement that "people like me don't have any say about what the government does."

- **Activity**—The UAW-financed study was limited to auto workers. While its findings will be applied to all labor, it should be recognized that UAW's members are probably more politically active and aware than most other unionists—and, particularly in the Detroit area, are more constantly and intensively a target of union "educational" programs.

Peace Stops at the Border

The U.S. auto industry has had no big strikes at home since the Chrysler pension fight of 1950. But the same companies operating in Canada have had two major walkouts—timed to begin with the opening of 1955 and 1956 model years.

Last year, the United Auto Workers (CIO) struck Ford of Canada in October and kept the company closed for 112 days. This year, UAW walked out against General Motors of Canada in mid-September, just as its lines were being cleared for new models. After nine weeks, negotiations are continuing, but with only slight hope for an early truce.

- **Not Satisfactory**—Not always, but frequently enough to make trouble, contract terms negotiated in the U.S. do not satisfy Canadian unionists. With sometimes different concepts of what a contract should provide, they may want more—or something different. When they do, their employers have a problem. A settlement giving Canadian workers more than the company's employees in the U.S. could cause flare-ups in this country. The result is, employers who do business on both sides of the border are wary about giving any extras to Canadian employees.

During pre-strike bargaining, GM of Canada offered its UAW negotiators a Detroit-pattern "package" valued at 17.6¢ an hour—a little less than in the U.S. because wage differences make holiday and vacation pay cost less in Canada. UAW said the "American settlement will not meet the needs of Canadian workers," and struck. GM defended its offer as incorporating all "the fundamentals which were accepted by U.S. workers"—including supplementary unemployment benefits linked with Canada's jobless-pay system.

- **Seniority**—For seven weeks, negotiations were snarled over one UAW local's demand for unrestricted seniority at GM's Oshawa operations. Such a

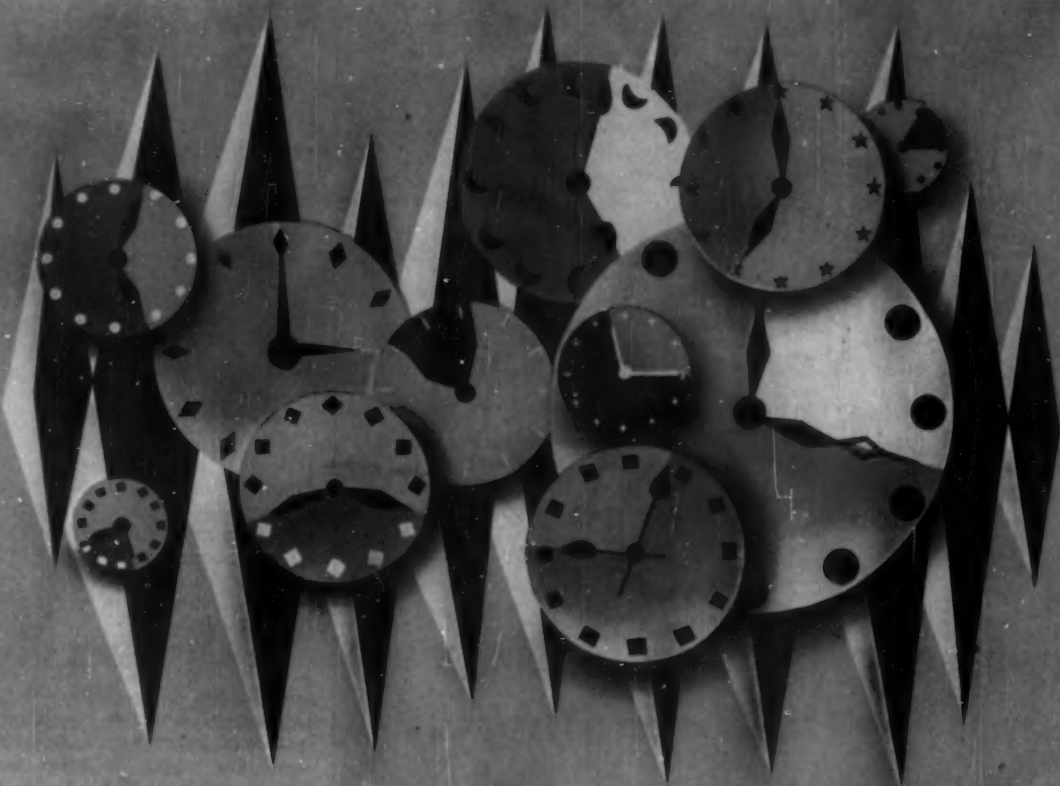
clause—which permits the displacement of any less-senior worker anywhere in the bargaining unit in a layoff—is fairly common in Canada's auto industry, but not in this country.

Ford of Canada accepted such a clause, and has regretted it ever since—claiming it cost \$612,000 in one year alone, including losses from 15,000 faulty crankshafts. GM refused to give in. After nearly two months of deadlock, UAW's top brass in Detroit (never enthusiastic about the broad Canadian seniority clause) prevailed on the Oshawa local to drop the demand.

With the seniority issue out of the way, national bargaining picked up again. However, it ran smack into two other hurdles—differences in the levels of U.S. and Canadian public pensions and in the policies of employers in the two countries over the financing of medical programs.

GM offered UAW in Canada the same pension deal made in this country, \$67.50 a month retirement pay after 30 years' service, to be added to public benefits. The union demanded more, pointing out that workers retiring in Canada draw less from the government than U.S. retirees do under the federal Social Security program.

- **Who Pays?**—GM also proposed the same 50-50 financing of an employee medical program that it negotiated with UAW in this country. However, UAW has been far more successful in Canada in winning health plans fully paid for by employers. Both Ford of Canada and Chrysler Corp. of Canada pay the whole cost of medical programs, as do Windsor-area suppliers. UAW demanded that GM follow the Canadian trend, not the U.S. pattern. But while GM negotiators admitted a well-established pattern in the Canadian auto industry—if not in Canadian industry generally—the corporation was wary of giving more to employees in the Dominion than in the U.S. **END**



"beat the clock"— is no game

"Beat the Clock," a famous television program, has become a popular home party game. But industrialists know that getting the most out of every hour on the time clock is no game, but a serious competition for business survival.

The answer is not one of getting tough and bearing down harder.

It's a problem, rather, of providing equipment that permits a man to work at a higher standard of productivity. When

it comes to lathe work, that's an Axelson—a lathe with honesty in its design and integrity in its construction. Call or write us. We'd like to drop in and tell you about it.



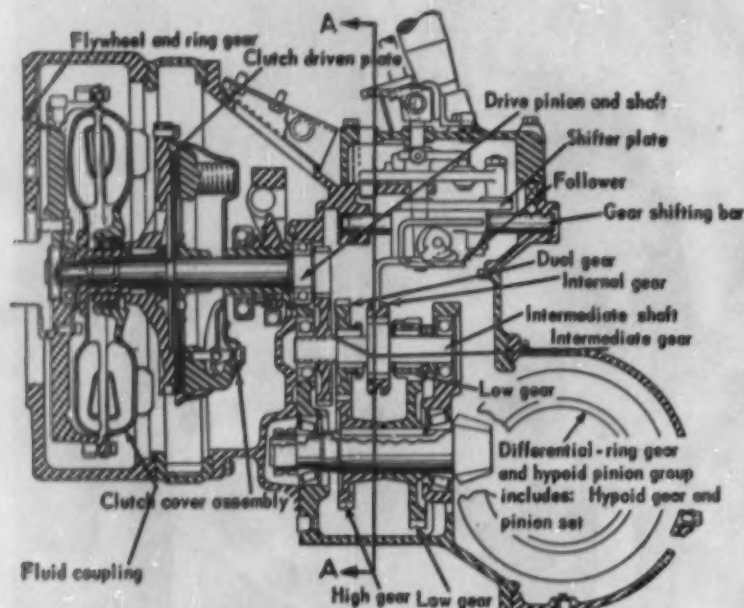
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Flywheel redesign conserves space for fluid coupling...

Twin Disc's Fluid Coupling, mounted compactly within the flywheel, solved the space problem, reduced clutch maintenance and increased maneuverability of Yale's new G-52 Gasoline Fork Truck.

Materials handling trucks must make many rapid reversals of direc-

tion, numerous short runs at high acceleration, smooth starts and stops that won't cause load shifting... obviously a fluid coupling job. But, in an already tight arrangement, nesting the coupling inside the flywheel was the only solution without increasing truck length.

Next time you're planning or designing equipment that requires the power-smoothing, shock-absorbing advantages of Twin Disc Fluid Couplings... particularly where overall space and weight limitations present tough obstacles... contact Twin Disc Clutch Company, Hydraulic Division, Rockford, Illinois.

Twin Disc 12.25 Fluid Coupling smooths out operations on Yale's new G-52 line of Gasoline Fork Lift Trucks.



Town Pressure...

... on mill workers to reject AFL union brings crackdown by NLRB. Labor expects order to help.

Unions about to step up organizing work in the South under a merged AFL-CIO banner are quietly calling a new National Labor Relations Board decision to the attention of their field people below the Mason-Dixon line. For labor, the decision could be highly important to the success of its drive for members throughout the rural South.

For years, labor has complained bitterly that a union drive in the rural South is not only opposed by the employer. Local officials and businessmen also often side against union organizers. The combined attack is frequently too much for the union. It's forced to retreat, or is defeated in an NLRB representation vote.

• **Newest Gain**—Two weeks ago, for the third time in its 20 years, NLRB set aside results of an election because of pre-election activities of outsiders directly connected with neither management nor union. It ruled that employees of Falmouth Co., in Falmouth, Ky., were denied free choice of a bargaining representative because of coercive activities in the community.

In only one of the two previous cases—from Smithfield, Va.—were similar charges made against the local business community. The one other previous case involved "persons unknown," who loitered outside an eastern Maryland plant, coercing workers interested in unionization. Neither of these cases was so clearcut and important, in union eyes, as the Falmouth Co. case. This time, unions say, the spotlight is on conditions they encounter frequently in labor drives in the lightly unionized rural South.

• **Against AFL**—In Falmouth, the community of 2,500 was solidly against an AFL union's attempt to organize the one local industry—a company financed by local businessmen to provide local jobs by manufacturing work clothes.

When the United Garment Workers (AFL) sought an election, a local group, the Needleworkers Assn. of America, described as a home folks' union, intervened. The owner of the building leased to the work clothes manufacturer warned workers that if they failed to vote for the local union, or against any union, Falmouth Co. would shut down. Its leases on both the building and its machinery, owned by Crown Overall Co., of Cincinnati, could be canceled, he said.

• **"Avoid Trouble"**—The local druggist

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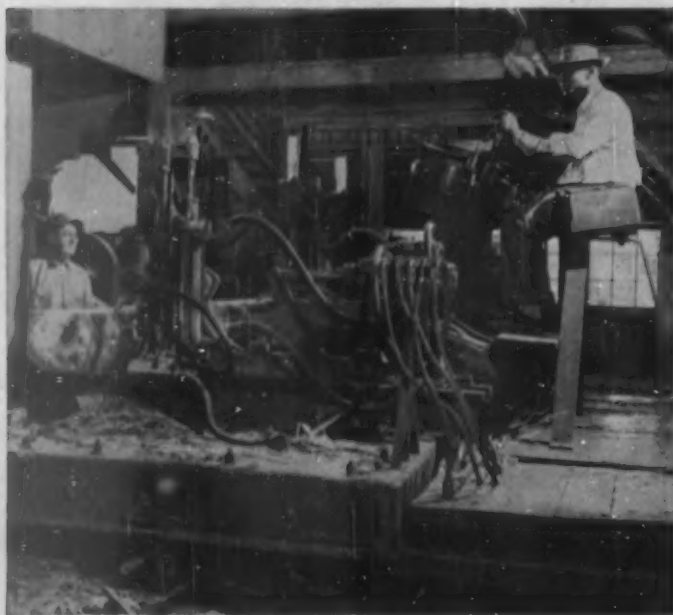
PROGRESS IN DIRECT CURRENT DRIVES

- Industry faces problem of increasing output without increasing costs.
- Automatic processing proves solution for many large and small plants.
- Statistics show growing demand for d-c motors as U.S. business swings to ...

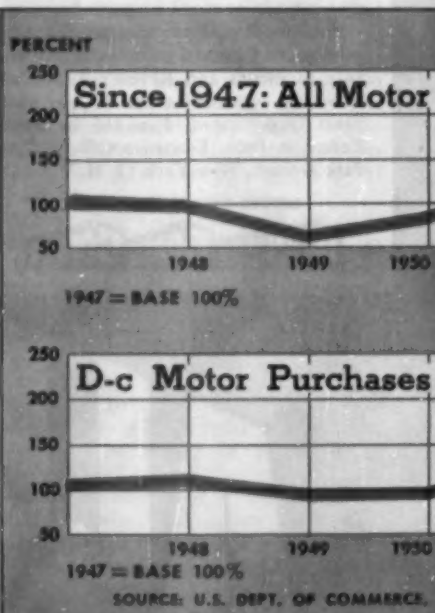


210,000 96-PAGE PAPERS AN HOUR is output of Philadelphia Evening and Sunday Bulletin presses driven by 86 40 hp G-E direct-current motors. Large and small newspapers across the

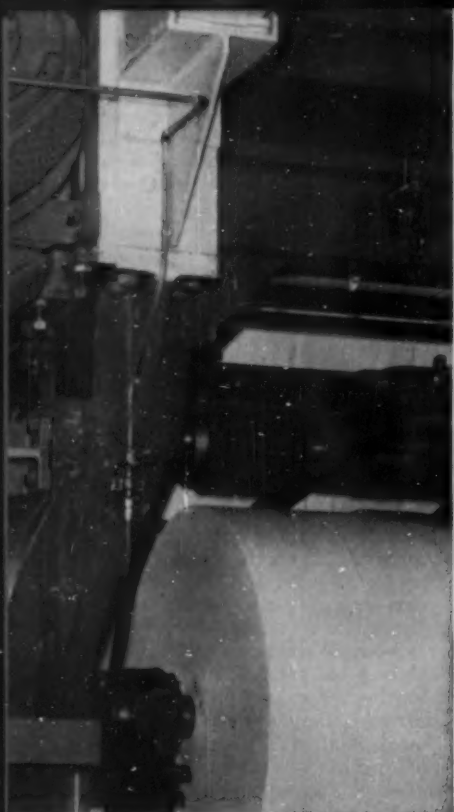
D-c Drives: The Key to High



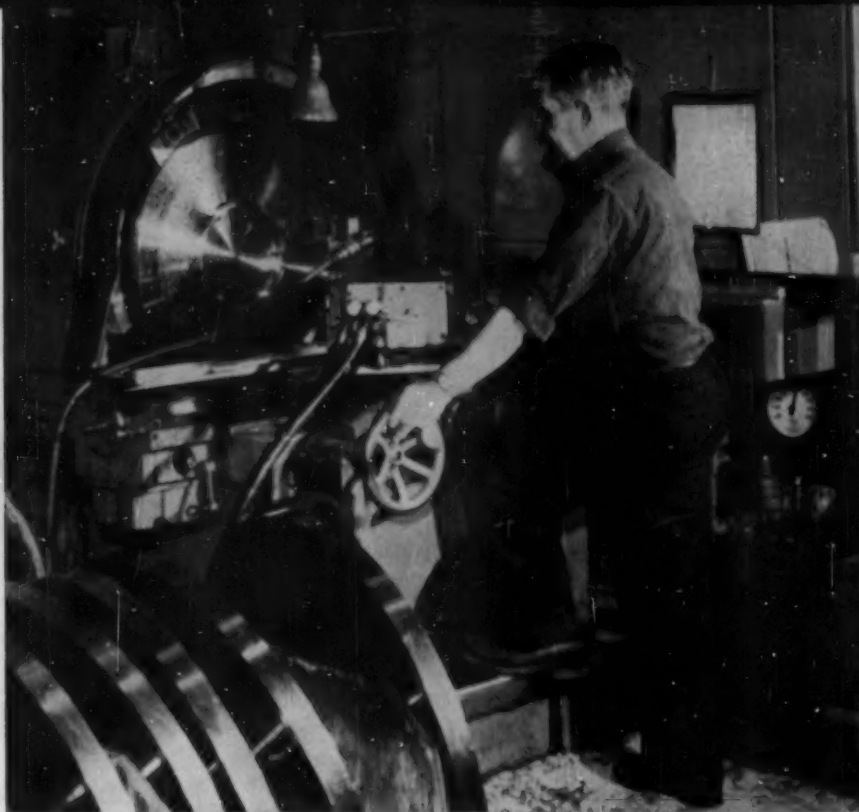
\$30,000 A YEAR SAVINGS in steam costs is reported by Crossett Lumber Co., Crossett, Ark., after converting steam-driven log carriages to G-E direct-current drives. D-c motors maintain 220,000 board feet per day output.



DC MOTOR PURCHASES REACH NEW HIGH since end of World War II. In period which saw 20% rise in all motor sales, direct-



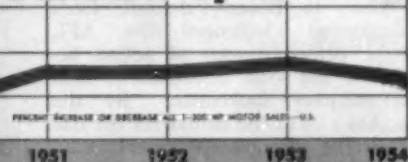
country are swinging to versatile d-c drives which provide an almost infinite number of speed steps, assure smooth acceleration and deceleration of presses, and drastically reduce paper waste.



MACHINING TIME IS CUT UP TO 50% by quick acceleration, deceleration and reversals provided by packaged General Electric direct-current drives. Above, adjustable-speed d-c motors provide constant surface-cutting speed for lathe machining jet engine wheels at the Lycoming Division of Avco Manufacturing Company, Stratford, Conn.

Output, Low-cost Production

Purchases Up 20%



Climb 85%



SURVEY OF CURRENT BUSINESS

current motor purchases climbed 85%. Industry's trend to automatic production has led to the increased demand for d-c drives and equipment.

Throughout the U.S., in factories large and small, direct-current motors are meeting the demands of accelerated, low-cost production.

• **Examples**—D-c driven newspaper presses roll out up to 210,000 96-page papers an hour. By converting steam driven log carriages to direct-current drives, one lumber mill reports savings of \$20,000 a year in steam costs alone. D-c equipped machine tools have cut machining time up to 50%.

• **Industry-wide**—Steel, textiles, materials handling, mining and many other industries are making greater use of automatic techniques to boost production and lower manufacturing costs. This trend has led to an increased demand for direct-current motors (graphs left).

• **Reasons**—For top efficiency, automatic processing requires controlled high-speed action and drive flexibility. Both of these requirements are best

supplied by d-c equipment. In addition, direct-current drives often increase versatility and output of a driven machine to such an extent that cost per unit of production is substantially reduced.

• **D-c power from a-c source**—A-c to d-c conversion equipment, such as G-E Speed Variators and motor-generator sets, enable industry to obtain d-c power simply and economically. Packaged conversion units may be placed next to driven machines or in other convenient load-center locations.

• **More information**—General Electric has specialists for every industrial field in convenient locations throughout the country. Engineers in 149 G-E Apparatus Sales Offices are ready to supply industry with complete information on how d-c drives can boost output and reduce manufacturing costs. *Direct Current Motor and Generator Department, General Electric Company, Erie, Pennsylvania.*

818-2

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and other townsmen advised Falmouth employees against voting for AFL. NLRB says they stressed that 75¢ an hour (the Falmouth wage rate) was better than nothing. They also said they wouldn't want to see pro-AFL employees of Falmouth get into any trouble.

A "Committee of Businessmen of Falmouth" sent campaign literature through the mail to employees. It urged them to vote against AFL and support the home folks' union. A local weekly newspaper carried editorials on the same theme. Along with the locally circulated Louisville Courier-Journal, it published reports that if the AFL union won, Falmouth Co. would move to London, Ky., where it was offered cheaper wages.

The mayor, using what he called "just plain old Falmouth talk," called on workers to vote for the community union instead of one—the AFL union—"dictated to by a bunch of outsiders."

• **Chosen Words**—Just before a 24-hour deadline on pre-election meetings on company premises, company officials addressed the workers on company time. In careful language they said they preferred "your own independent union, in order that we [can] deal directly with home folks."

Then, calling attention to NLRB bars against threats or promises intended to influence an election, they said: "We wish to here and now set at rest any loose talk or threats that the Falmouth Co. will close if you vote for the AFL union. . . . It will continue to operate and serve you regardless of which union wins tomorrow, or if neither wins."

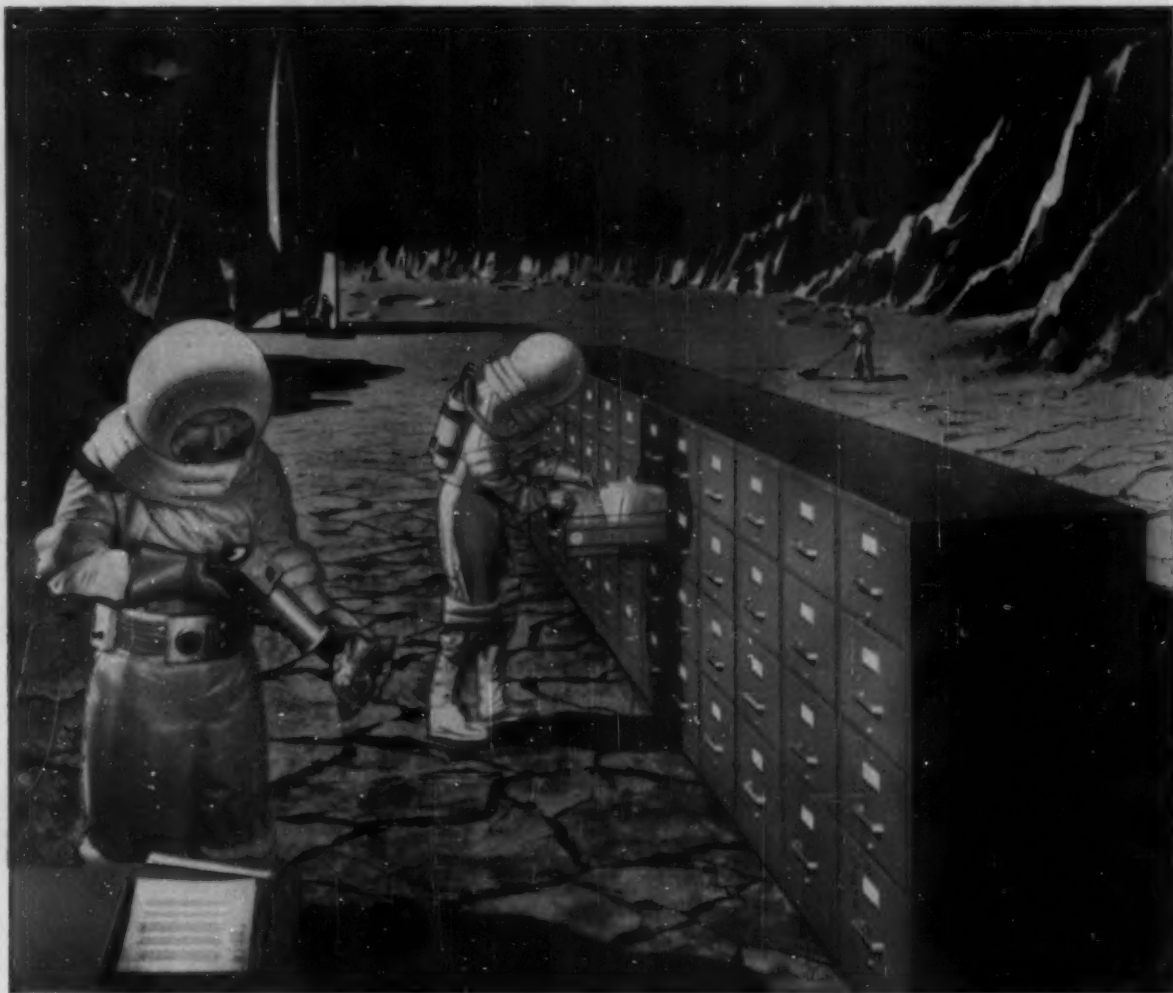
Next day, 114 workers cast ballots. Thirty-eight were for AFL, 64 for the independent union, 5 for no union, and 7 ballots were challenged. AFL protested the election and charged interference.

• **Who's to Blame**—Falmouth Co.'s management challenged the AFL charge, denied concert of action between it and local businessmen. Said the company spokesman: "By the speeches . . . to the employees the day before the election, [Falmouth Co.] completely absolved itself of any coercive conduct and cleared away any effect the coercive conduct of others may have created."

NLRB held that it was not necessary to prove concert of action. It said, too, that the company's single statement assuring employees that the plant would keep operating was not sufficient to overcome the widespread threats that employees heard outside.

Fear of economic loss, said NLRB, made the rational uncoerced selection of a bargaining representative impossible.

And so the board upheld completely a hearing officer's ruling that the election should be voided. **END**



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More Organizing

NLRB figures show rise in election petitions as unions step up activities before AFL-CIO merger.

Merger of labor's big federations is supposed to herald a new campaign to organize the unorganized, but many unions are not waiting for that. The mere prospect of merger has stirred up internal pressures and set forth a rash of organizing.

A sharp rise in National Labor Relations Board business reflects the increased organizing activity that has been going on. In the most recent quarterly period (July-Sept.), unions filed 1,824 petitions for collective bargaining elections. This is an increase of 36% over the corresponding 1954 period.

• **AFL Busiest**—Affiliates of the AFL were the labor board's biggest customers. They outnumbered the CIO petitions by more than two to one—1,206 petitions filed by AFL unions, 503 by CIO unions. Unaffiliated unions filed 115 petitions.

Within the AFL, the Teamsters' union alone filed almost as many petitions (317) as the total filed by the CIO's most active petitioners (321).

Among the AFL unions, the Machinists, with 167 petitions, ran second to the Teamsters. Then came the Electrical Workers with 56; the Carpenters with 53, and the Meat Cutters with 52. These five AFL unions asked for more elections to establish their exclusive bargaining rights than did all 32 affiliates of the CIO.

Leading the CIO petitioners were the Steelworkers, with 116; the United Auto Workers, close behind with 110; the Electrical Workers with 37; the Retail Workers with 31, and the Oil, Chemical & Atomic Workers with 27.

• **Widely Scattered**—The upsurge in requests for elections can't be explained by any concentration of union campaigning in the South or any other particular area of the country. On the contrary, a study of the geographic origin of the election petitions shows a remarkable degree of uniformity throughout the U. S.

The only marked exception is the Pacific area where the number of cases ran contrary to the national pattern. In the past year, there was a drop of 4% from the number of petitions filed on the West Coast.

• **Why the Late Surge**—It appears that the merger itself has been a driving force in the surge of organizing.

Unions want to strengthen their position, compared with their counterparts, in the merged federation.

The merger at this point is limited to the federation, not to the unions themselves, which are autonomous bodies. However, inherent in all the talk of merger in recent months is the prospect that eventually unions of conflicting or allied jurisdiction will negotiate their own mergers or working agreements. Presumably they want to negotiate from strength.

Then, too, Article II of the merged federation's draft constitution provides that "each such affiliate shall respect

the established bargaining relationship of every other affiliate and no affiliate shall raid the established collective bargaining relationship of any other affiliate.

This is a turning away from the traditional AFL stress on a union's charter as the limitation on its organizing domain.

Instead, it puts the stress on what each union has succeeded in organizing or placing under collective bargaining agreement.

Cost of Living:		What's Happening to It			
		1947-49 = 100			
		Food	Clothing	Housing	
				Total	Rent Only
October, 1948	104.3	104.7	105.4	103.2	102.1
October, 1949	101.5	99.3	97.6	103.5	106.1
October, 1950	105.0	104.3	100.9	108.1	109.6
October, 1951	112.1	113.5	109.2	113.2	114.8
October, 1952	114.2	115.0	105.6	115.2	118.8
October, 1953	115.4	113.6	105.5	118.7	126.8
October, 1954	114.5	111.8	104.6	119.5	129.0
November	114.6	111.1	104.6	119.5	129.2
December	114.3	110.4	104.3	119.7	129.4
January, 1955	114.3	110.6	103.3	119.6	129.5
February	114.3	110.8	103.4	119.6	129.7
March	114.3	110.8	103.2	119.6	130.0
April	114.2	111.2	103.1	119.5	129.9
May	114.2	111.1	103.3	119.4	130.3
June	114.4	111.3	103.2	119.7	130.4
July	114.7	112.1	103.2	119.9	130.4
August	114.5	111.2	103.4	120.0	130.5
September	114.9	111.6	104.6	120.4	130.5
Oct., 1955	114.9	110.8	104.6	120.8	130.8

Data: Dept. of Labor, Bureau of Labor Statistics.

©BUSINESS WEEK

The Balance Holds Steady

Wages of a million workers under "escalator" contracts will remain unchanged for the next three months. That's because the Bureau of Labor Statistics' latest cost-of-living index—for mid-October—stayed at 114.9% of average 1947-49 prices, the same figure as in mid-September.

Auto workers whose c-o-l clauses were renegotiated last summer got 14-an-hour raises when the government index reached 114.7% in July, the last adjustment date. The slight index rise since then was not enough to lift pay another notch; workers won't be due another penny unless the c-o-l index touches 115.2%.

• **Food Down**—Food prices showed a seasonal drop of 7% in mid-October, but the decline was offset by higher transportation and housing costs and a slight rise in the cost of medical and

personal care. Prices for apparel and other index items showed no change from mid-September levels.

According to BLS, food prices—and perhaps apparel costs—will drop during the next month or so, but rents and service costs will probably "keep on creeping up."

• **Take-Home High**—BLS figures for the take-home pay of the average factory worker rose in October to \$72.18 for the man with three dependents, or \$64.85 for the worker with no family. The October averages were about \$5 higher than a year ago, and at a record high for the month.

BLS reported that higher hourly pay and a longer work week accounted for the increased take-home wage. The average work week in October was 40.1 hours—1.3 hours a week more than in October, 1954. **END**



Could 35,000,000 households make a market for a colorful, lightweight garbage bin?

MANUFACTURE OF SUCH AN ITEM IS POSSIBLE WITH REINFORCED PLASTICS!

In countless urban and suburban communities the problem of storing garbage is a hideous nightmare. Why not replace the unsightly pail with an attractive unit that anchors to a fence, side of a garage, or on any convenient spot that will keep it off the ground... out of the reach of prowling pets?

The ideal material for such a garbage bin is at hand. By using fibrous glass, bonded with polyester resins, it could be molded with rounded corners for quick cleaning. It would be dentproof, weatherproof, resistant to corrosive acids, and so light in weight it would handle easily. It could be colored to blend harmoniously with its background.

Every year uses like this for reinforced plastic materials are growing. They are already widely applied to sports car bodies, boats, corrugated building panels, modern furniture, air conditioning ducts.

The basic ingredients for manufacturing polyester resins are supplied by Monsanto. These include Monsanto styrene monomer and phthalic and maleic anhydrides.

If you would like a glimpse of other possible new uses for reinforced plastics, you are invited to request "A Sketch Book of Profitable Products."

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Business Marriages in 1955

Will Reach a 25-Year High

This year, business mergers will reach the highest point in 25 years, according to the Federal Trade Commission's count. Administration antitrusters are worried not so much about the economic impact as they are about the political implications.

Here are some of the statistics turned up by FTC:

- Acquisitions in manufacturing and mining for 1955 probably will top 500—a jump of about 33% over last year's 387 business marriages. The record year was 1929, with 1,245 mergers. In 1930, the figure was 799.

- Companies with assets of \$10-million or more will make up better than 70% of the 1955 mergers, compared with 65% during the 1948-54 period, 58% in the years 1940-47. Those with assets over \$50-million comprise a third of the total, against 29% in the other two periods.

In the banking field, other government agencies expect 240 to 250 bank mergers in 1955, the most since 1931. In the last three years, respectively, there were 207, 116, and 119.

From the economic standpoint, FTC stands on its report, issued last May, covering the 1948-54 period (BW—May 21 '55, p33). The people at FTC say they are satisfied with their present legal authority. In listing reasons for the rash of mergers, they point out that many of them are noncompetitive.

But Justice Dept. is more concerned. Antitrust Chief Stanley Barnes has asked Congress for stronger merger controls.

...

Democrats Spike Republican Move

To Probe Unions' Political Action

A Republican move to investigate the partisan political activities of labor unions was spiked by the Democrats this week.

Sen. Carl T. Curtis (R-Neb.) had lined up several Michigan unionists who wanted to testify that they were compelled to pay dues and "other assessments" that were used to support Democratic political candidates who were offensive to them. He proposed to parade them before the Senate subcommittee on constitutional rights, but Chmn. Thomas C. Hennings (D-Mo.) slammed the door in his face.

Curtis plans to revive the issue next session by proposing amendments to Hennings' bill for a general overhaul of federal election laws. But no action is expected on Curtis' proposed crackdown on unions or the bill to give Congress new powers over campaign expenditures reaching down to precinct levels.

...

Flemming Throws Cold Water

On Oil Pipeline Proposals

The government this week indicated that it would turn thumbs down on long-standing proposals that it help finance pipelines capable of delivering 1-million bbl. of crude oil daily from the

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CRANE-BRIDGE BRAKES
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World's largest ladle cranes equipped with Wagner Hydraulic Crane Bridge Brakes



Three 450 ton ladle cranes, at Fairless, are equipped with Wagner Type H Hydraulic Crane Bridge Brakes like the one shown at the left.

At U. S. Steel's Fairless Works, Wagner hydraulic crane bridge brakes enable operators to bring the world's largest ladle cranes—450 tons each—to safe smooth stops as easily as if they were braking an automobile.

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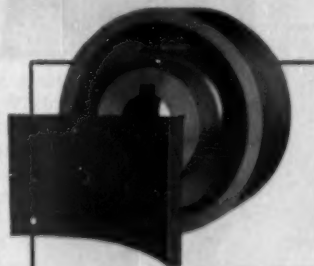
ciency, lengthen lining life and reduce maintenance costs:

REMOTE CONTROL BLEEDER—Enables operator to bleed hydraulic lines from the cab.

SELF-CENTERING DEVICE—Centers shoes on wheel and prevents brake drag.

ONE-POINT ADJUSTMENT—Makes it easy to keep brakes properly adjusted.

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Replacement Lining and Brake Wheels

Wagner offers the perfect combination of brake wheel and non-scoring lining for replacement needs. Specially designed for industrial uses, it is available in rolls, blocks, and discs.

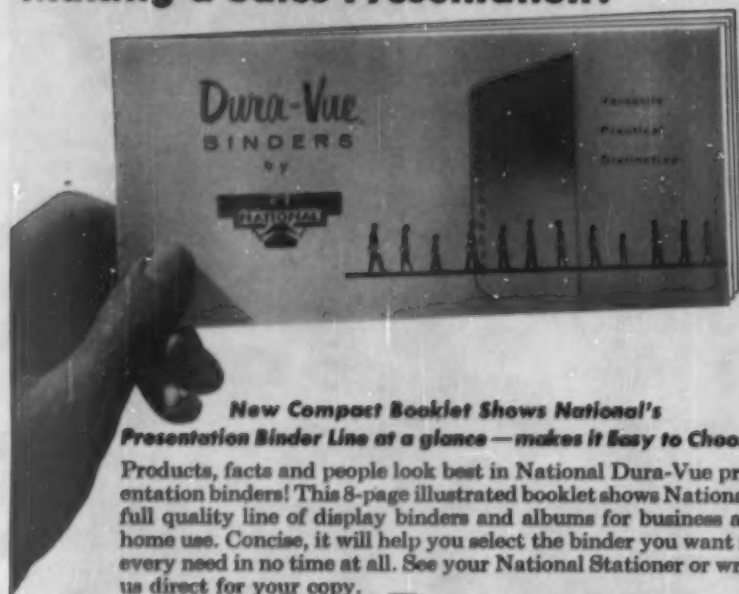


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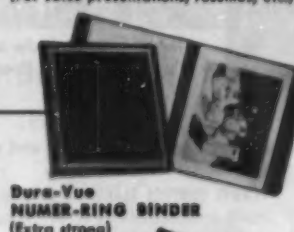
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Gulf Coast to the East Coast.

Two operators seeking federal underwriting of such projects—American Pipe Line Corp. and Texas Eastern Transmission Corp.—had based their cases on government appraisals that a world military crisis could choke off foreign oil and dry up Eastern refineries.

In giving a tentative “no”—that soon is expected to be reinforced by a formal turn-down—to the proposals, Defense Mobilizer Arthur S. Flemming said emergency oil planning is now oriented more toward the booming Rocky Mountain and North Dakota-Canada oil fields. New reservoir development and pipeline expansion in these areas, he said, will make oil available at the Pittsburgh-Lima (Ohio) gateway.

But no matter where the crude comes from, the government still is faced with this big problem: how to get 1-million bbl. of oil a day to flow across Pennsylvania into the New York-Newark area. Flemming and his chief oil advisers think the government should either stockpile pipe and valves so a pipeline could be built in a hurry during an emergency or construct the line now for stand-by use.

• • •

ICC Bans Segregation By Interstate Carriers

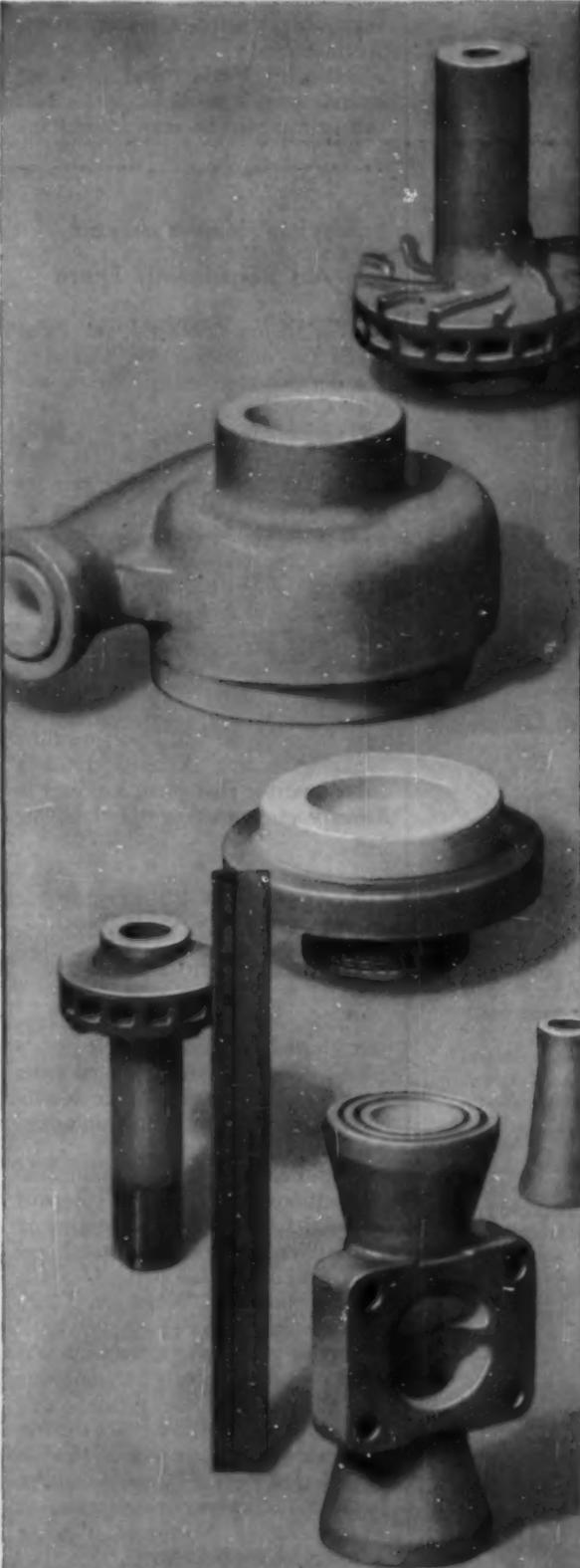
The Interstate Commerce Commission last week ordered an end to racial segregation on trains, buses, and public waiting rooms, effective Jan. 10, 1956.

The order marks a shift in ICC interpretation of the Interstate Commerce Act. In the past, the commission had held that requirements of the act had been met where equal facilities were provided.

Now, ICC says that interstate travelers are “entitled to be free of annoyances, some petty and some substantial, which almost inevitably accompany segregation.”

Technically, the ICC order was not a blanket ruling—only 12 major railroads and one bus company specifically were ordered to end segregation. But, in effect, the ICC ruling sets the pattern on all interstate travel.

For railroads, the ICC ruling just about spells the end of all segregation



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Impact Resistance is $3\frac{1}{2}$ times better.

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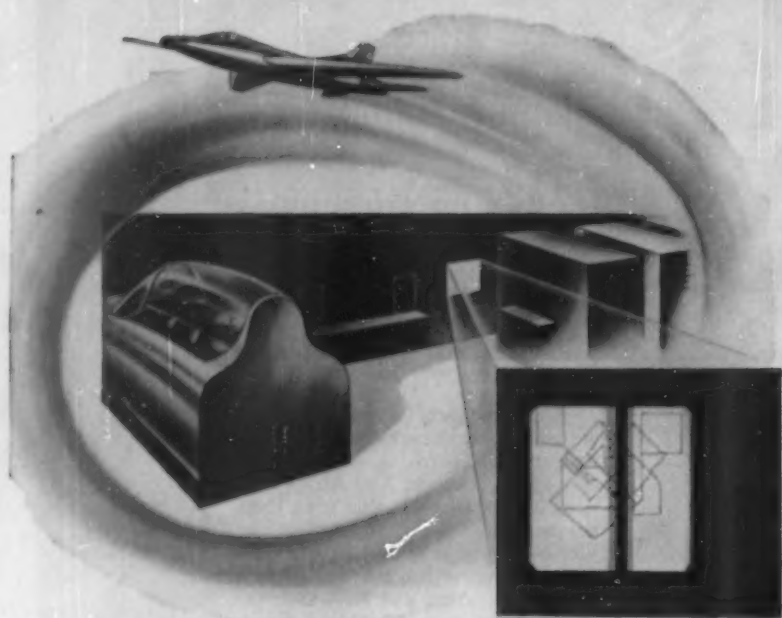
All over the country, successful ceramic manufacturers are doing great things with ALCOA Alumina. Whether they make abrasives or glazes, refractory bricks or glass, they know that by adding this uniformly pure aluminum oxide to their mixes, they make their products better.

For the qualities most important in your ceramics, rely on ALCOA Alumina. It can make any ceramic product—*your product*—the best of its kind. We'll gladly tell you how, and send you samples. Write to: ALUMINUM COMPANY OF AMERICA, CHEMICALS DIVISION, 700-M Alcoa Building, Pittsburgh 19, Pa.

ALCOA does not manufacture ceramics. These data and pump parts are supplied by General Ceramics Corporation, Kenilworth, New Jersey.



ATLAS BUILT PLOTTING BOARD



Scoreboard For Tomorrow's Pilots

● The plotting board designed by Melpar, Inc.—scoreboard of the new U.S. Air Force supersonic simulator for F-100A planes—is another example of Atlas manufacturing ingenuity at work.

Atlas specializes in "precisioneering" electro-mechanical assemblies from the pilot stage to production efficiency. Furnishes the practical engineering step and the facilities between the idea and the production line.

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since almost all of their operations are interstate.

But many Southern bus companies do not cross state lines. And these can be expected to keep segregation.

• • •

Lobbyists' Views Asked On Act Regulating Them

Washington lobbyists are being asked for suggestions on amending the law that requires them to register with Congress.

The lobbying law has been a problem ever since it was passed in 1946—mainly because of the difficulty of deciding exactly what lobbying is. One issue is whether the law infringes the constitutional right of petition. But the Supreme Court last year upheld several of the law's key provisions.

Sen. John F. Kennedy, (D-Mass.) has sent out questionnaires to some 200 lobbyists, who now must register four times a year and report on their lobbying income. Kennedy heads a subcommittee that plans hearings in January on amending the lobbying law.

• • •

U.S. Company Gets Nod To Import Canadian Gas

Pacific Northwest Pipeline Corp. has cleared the last obstacle to its plan for importing natural gas from Canada to supply the Pacific Northwest, the nation's last major untapped gas market.

The Federal Power Commission has authorized the Houston company to build facilities for importation of 303-million cu. ft. of natural gas daily, to be supplied at the U.S.-Canadian border by Westcoast Transmission Co., Ltd.

In the past, the commission has been cool to proposals for importing Canadian gas on the grounds that U.S. consumers should not be dependent on a foreign source. But in its order last week, FPC said Canadian gas would be an excellent supplement to gas Pacific Northwest Pipeline will buy in the Southwest.

Pacific Northwest will build 955 mi. of new pipeline, costing about \$28,550,000, to handle the Canadian gas.



"The ace of spades says we trade 'em in"

Economics, not chance, should govern trade-ins of old typewriters.

If, after x years, yours cost too much to service and turn out bad-looking work, get rid of them. Get new Royal Standards.

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New Competition on Fat Air Routes

In three decisions in three months, Civil Aeronautics Board cuts regional carriers in on markets dominated by airlines' big four up to now. So now competitors are:

New York-Chicago

Old	American	New	Capital
	TWA		Northwest
	United		

New York-Atlanta-New Orleans

Old	Eastern	New	Delta
			Capital

Chicago-Los Angeles

Old	TWA	New	Continental
	United		
	American		

Denver-San Francisco

Old	United	New	Western
-----	--------	-----	---------

New York-Houston

Old	Eastern	New	Delta
			American

New York-Dallas

Old	American	New	Branniff
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Help for the Second String

CAB ends a 20-year policy of aiding big air carriers, and now it uses its powers to build new strength into smaller airlines.

For more than two decades, a small group of airlines reaped the biggest benefits from the government's policy of building a national system of commercial air carriers. They got the fat routes, the subsidies, the protection from competition necessary to keep in business and help them grow.

And so they became the big four of the business—United Air Lines, Inc., American Airlines, Inc., Trans World Airlines, Inc., and Eastern Air Lines, Inc.

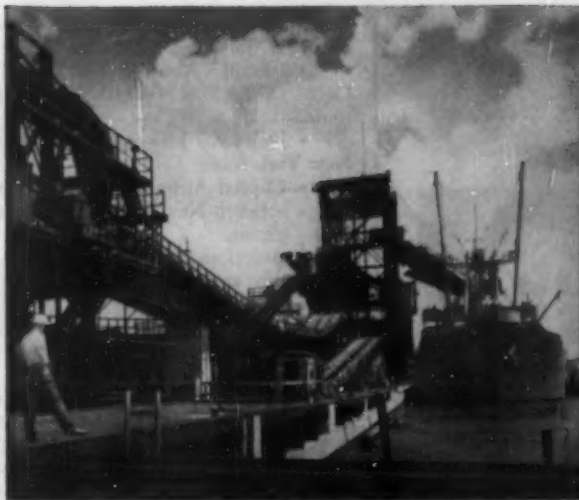
But over the past three months these big four have seen the government's civil air regulators abandon the policy that helped bring them to their dominant position in the industry. Now that the big four are off government subsidies and are making profits on their own, the Civil Aeronautics Board is deliberately building competition for the lines that once got the plums.

• **Key Decisions**—CAB revealed its new philosophy—one that gives a leg up, wherever possible, to smaller regional and trunk airlines—with:

• Three decisions parceling out routes, in which it favored smaller airlines over the big four carriers already serving the cities. (It also favored more competition among the big four.)

• One big turnaround affecting some 49 non-scheduled operators, in which the board gave this harassed industry a new lease on life by permitting the non-skeds to become limited-scheduled airline operators, and unlimited operators on charter flights (BW—Nov. 19'55, p31). This stakes out new competition for all the scheduled carriers from an unexpected quarter.

The best summing-up of the new climate in the airways came last week when CAB announced its decision in



Car-a-minute coal loading paces the tempo of this bustling Port.



Fast handling, 20 berths, mean "no waiting" for general cargoes.



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—ships in the fewest possible man hours, ship hours and car hours.

Add to *time-saving* the natural advantages of the great Port of Baltimore.

See how it thrusts deep towards the Nation's heartland. Observe its mild, open climate. And consider the cooperative temper of all those with whom you come in contact in the Port.

It is easy to understand why use of

Western Maryland's facilities at Port Covington Terminal makes such pleasant reading on comparative cost sheets.

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Scottish born Duncan Menzies, President of Servel, Inc. has, during 35 years of business experience, achieved the unique success which today causes our industrial world to regard him as a man of rare business acumen and shrewd decision. Mr. Menzies, in addition to his broad responsibilities of guiding policy for Servel, finds time to serve as board member of other industrial firms. To safeguard precious minutes for such men . . . and for you who appreciate the value of time, Rolex watches are available through leading American jewelers.



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the crucial Southwest-Northeast service case. By the board's decision:

- Braniff Airways Inc. gets a Dallas and Fort Worth-New York route.
- Delta Air Lines gets a Houston-New York route.
- Capital Airlines Inc. gets better routes between New York, Atlanta, and New Orleans.
- American Airlines gets service to Pittsburgh and a new Houston-Pittsburgh route.
- Trans World Airlines gets Tulsa and Oklahoma City as points on its coast-to-coast route.
- Eastern Air Lines gets relief from a restriction that kept it from serving some Southern cities from Pittsburgh.
- **Choice Routes**—The key to the new airways policy lies in the awards to Braniff, Delta, and Capital. They belong to the group of six carriers in the middle of the trunk airline scale—they are off subsidy, but together they don't do so much business as American Airlines, American, Eastern, TWA, and United still carry about 75% of domestic traffic.

Bringing Braniff and Delta into New York was the major concession in the case. No other traffic point compares with New York as a source of business.

• **First Cases**—The new policy first showed up about three months ago in the New York-Chicago service case. Capital got its routes adjusted so it can offer competition to TWA, United, and American between New York and Chicago, and points along the way. Northwest Airlines Inc., another of the smaller carriers, also got a New York-Chicago route.

Then, in the Denver service case, two small Western carriers were given new routes. Continental Air Lines, Inc., can now fly between Chicago and Los Angeles, via Kansas City and Denver; Western Air Lines, Inc., has a new Denver-San Francisco route. The decision also establishes new competition on western routes among United, TWA, and American.

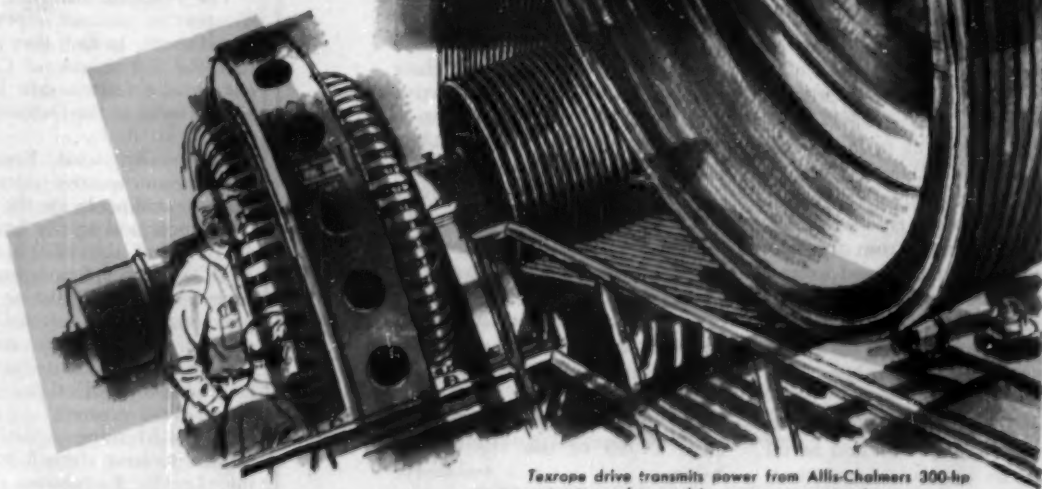
But it wasn't until last week's decision on Southwest-Northeast services that the board spelled out its new policy. It said it believed it vital to develop the national air route structure by decreasing the gap between the relative size of the big four carriers and the smaller trunk airlines.

CAB wants to bolster the smaller carriers financially so that competition between them and large carriers will be fact rather than theory, as it often is now. It also hopes that stronger airlines will erase the possibility that the government will have to return to airline subsidies in the event of a business setback.

• **Latest Gains**—Still, the airlines' current business probably was the most

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longer and costs no more than ordinary belts; and the *Vari-Pitch* sheave — the low-cost way to obtain variable speeds.

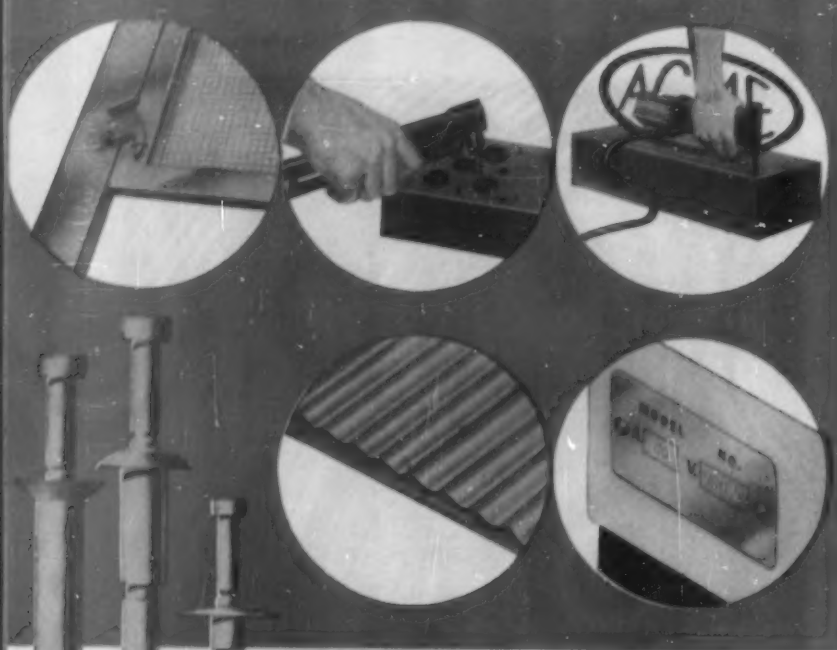
Whatever the application, there's one best *Texrope* drive to do the job most efficiently and economically. To find out more, contact your nearest Allis-Chalmers distributor, or write Allis-Chalmers, General Products Division, Milwaukee 1, Wisconsin.

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telling point behind CAB's reasoning that many airlines no longer need protection.

Business for the trunk airlines, just shy of \$1-billion last year, will probably be up about 15% this year. Profits, very slim last year, may improve as much as 50% this year. Traffic will show a gain of around 20%.

CAB hasn't been entirely unanimous in setting its liberal new policy. Republican Chmn. Ross Rizley and Democrats Joseph P. Adams and Josh Lee have been the majority in most disputes. Republicans Chan Gurney and Harmar Denny have generally gone along, but have filed sharp dissents when they thought the majority was pushing its competitive philosophy too hard. Rizley has been the swing vote between the two Republicans and two Democrats.

President Outlines Ethical Code for WOCs

Businessmen serving the government without pay got ground rules for ethical behavior from Eisenhower this week.

The rules are stringent, but not so stringent as advance reports had portrayed them. In fact, they contain little that the last session of Congress had not already written into law, through amendments to the Defense Production Act.

Technically, what Eisenhower did was issue an executive order interpreting those amendments for the guidance of department and agency heads who take advantage of the 1950 act to employ WOCs (without compensation: full-time workers who take no government pay and, generally, remain on the payrolls of their former employers) or experts and consultants (part-time workers whose only federal pay is in the form of per diem expenses).

• **Wider Meaning**—Actually, the move appears to have a much broader meaning. Legally, Eisenhower did not even need to issue the order; each affected agency could interpret the law for itself—and the language is such that the intent is unmistakable.

But, in issuing the formal document, Eisenhower brought his personal influence to bear on a wider area. As of June, only 512 WOCs, experts, and consultants were in government under the Defense Production Act. These are the people on whom the order has a direct bearing. However, the net result of the White House action—both in the advance build-up and the well-publicized actual release of the order—is forcibly to remind the entire executive family to steer clear of conflict-of-interest situations, real or potential.

• **Background**—This reminder came

quickly after the newest in a series of incidents that have plagued Eisenhower and given Democrats hope of live political ammunition for 1956.

The latest incident involved Chmn. Hugh W. Cross of the Interstate Commerce Commission, who offered Eisenhower his resignation while under Congressional attack for interfering in a competitive case, outside ICC jurisdiction, relating to taxi shuttle service between Chicago railroad stations. The President accepted instantly.

Cross was a salaried, full-time employee and, therefore, outside the executive order. Nor would the new standard have had direct bearing on the earlier, well-publicized cases of Air Force Secy. Harold Talbott, Budget Bureau adviser Adolphe Wenzel, or Public Buildings Commissioner Peter Strobel.

But people who now or in the future take positions like those of Talbott, Cross, Wenzel, or Strobel can find in the order a guide to the ethical maze where blacks and whites often become grays.

• **The Rules**—And for businessmen and others willing to volunteer free service to the government it sets up an absolutely binding code. The volunteers must:

- Desist from making of actual policy, merely contenting themselves with advising "appropriate officials."

- Refrain from making recommendations on government affairs that involve companies in which they have direct or indirect connections.

- File for publication in the Federal Register, an official public gazette, a statement of all connections with corporations, partnerships, and other businesses, current and during 60 days immediately preceding their government employment. (This provision does not require disclosure of wealth, but only that the employee has an interest, without regard to its size.)

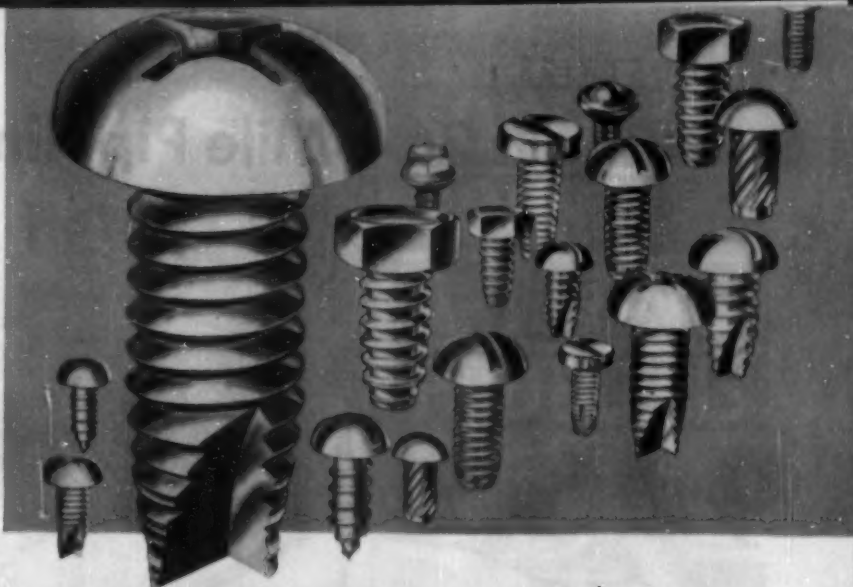
- **Policy Making**—These principal segments of the Eisenhower order are taken, word for word in some cases, from the Congressional act.

Eisenhower went beyond Congress in two points:

- As to policy making, he put the same ban on experts and advisers as on WOCs. Congress covered only the latter.

- He told department and agency heads to specify, in detail, the functions to be performed by WOCs, experts and advisers. This will be in addition to the statement, required by the law, on qualifications of the prospective employee and justification for using him instead of a full-time salaried employee.

Congressional Democrats took a somewhat attitude. One says "there's nothing substantive here that wasn't in the bill we passed." **END**



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The thread-forming types are widely used in sheet metal, castings and in a variety of non-metallic materials. The thread-cutting types have a cutting face which acts as a tap when the screw is driven into an untapped hole. They

are popular for fastening to castings, sheet metal, structural steel, forgings, soft metals and plastics.

Townsend Tapping Screws are available in the types shown here in a variety of head styles with slotted, Phillips recessed and hex heads. If leakproof fastening is desired, these tapping screws can be provided as Tuff-Tite® Screws. They have a pre-assembled neoprene washer which is forced into the hole and around the threads when the fastener is tightened to form a watertight and airtight seal.

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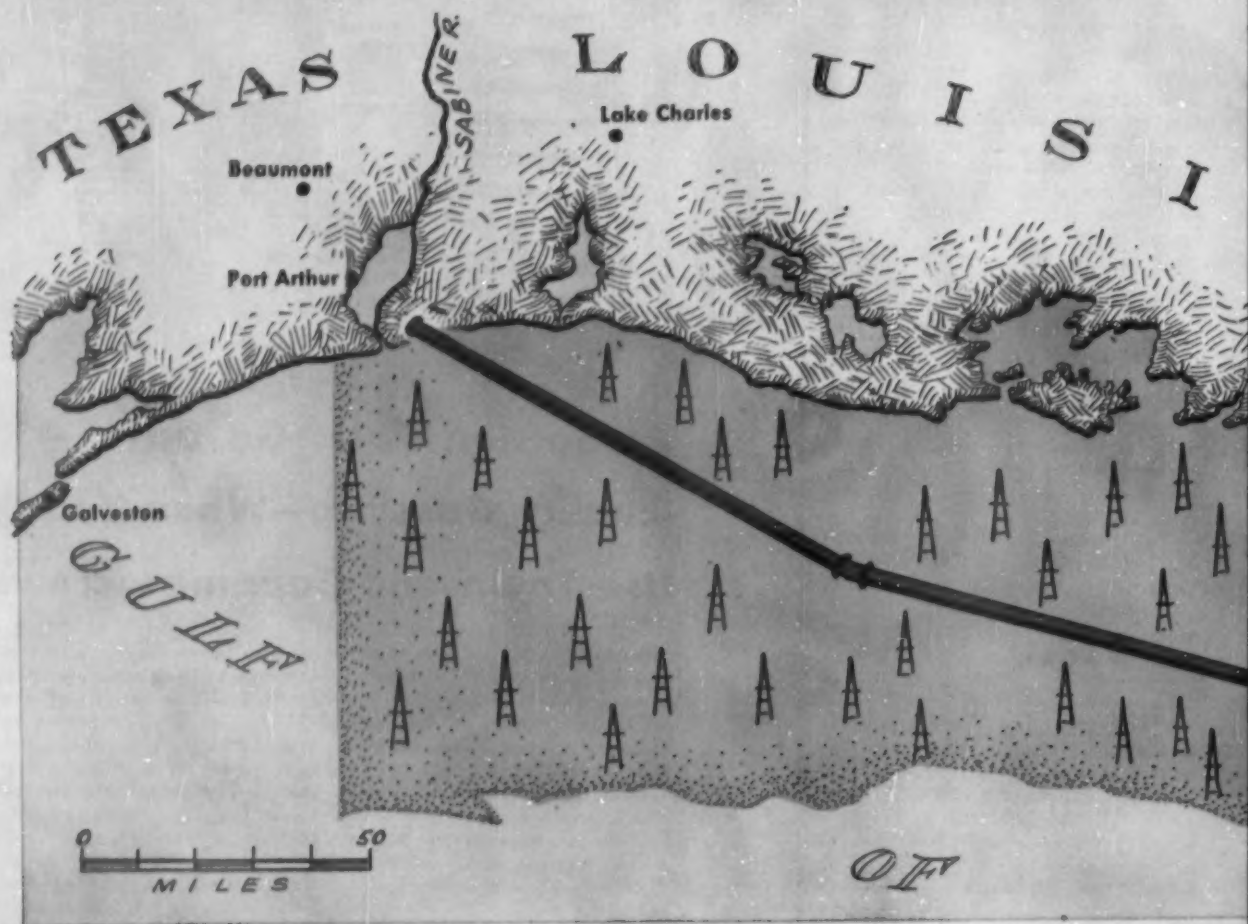
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Putting a 364-Mile Pipeline Underwater



To Bring Offshore

If the Federal Power Commission approves, Offshore Gathering Corp. hopes to get the longest underwater pipeline ever built into operation in the Gulf of Mexico about a year from now. It will become the first major line to pipe into shore the enormous potential of offshore oil and gas production (BW—Nov. 26 '55, p31).

The project (map) calls for two parallel undersea pipelines approximately 800 ft. apart to run from the Texas side of the Sabine River to about 25 miles offshore Louisiana and back into the country on the Mississippi side of the Pearl River. One line will carry crude oil, and the other, larger one, gas. The total length will be 364 miles.

EQUIPMENT like this may soon be crawling into the Gulf of Mexico to help offshore oil wells get their products ashore.

The proposed lines run through the heart of present offshore production and would tap one of the last known major reserves of gas and oil in this part of the world. According to Interior Secy. Douglas McKay, the government estimates the offshore potential of natural gas at 63-trillion cu. ft.

• **Investment**—Up until now, the combined investments of the offshore producers add up to something over \$750-million, of which the industry so far has got back only about \$125-million. Offshore Gathering Corp.—which came into being as a Delaware corporation on Sept. 7—will spend more than \$150-million to build the lines, if FPC approves its application for a certificate of public convenience and necessity.

Within two years, Offshore expects to be moving a minimum of 500-million cu. ft. of gas and 200,000 bbl. of oil





Oil to Market

each day. The value of these products would run to more than \$600,000 a day. If the deal goes through, the new corporation expects to earn the approximate 6% on investment that federal regulation allows such operators to make.

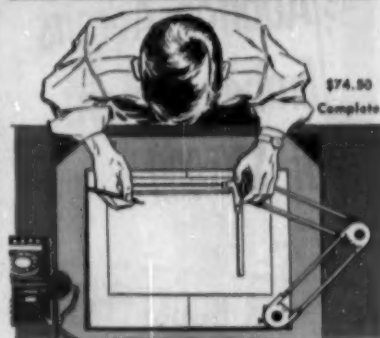
• **Who's Who—Offshore** Gathering Corp.—composed of seven partners, each of whom owns one-seventh of the company—was organized to include financial people, legal people, oilmen, construction engineers, a big pipeline builder, and the company that has a phenomenal reputation for laying pipe under water. The partners are:

David C. Bintliff, president, a prominent Houston oil operator; H. J. Mosser, president of Associated Oil & Gas Co.; David T. Searls, Houston lawyer; E. O. Bennett, head of Petroleum Consultants of Houston; John

Williams, head of Williams Bros. of Tulsa, international pipeline contractors; S. V. (Sammy) Collins, head of Collins Construction Co., which has experience in such tough engineering jobs as laying the pipe across the Narrows between Staten Island and Brooklyn for the Transcontinental Gas Pipe Line Corp. (BW—May 24 '52, p134); and Salomon Bros. & Hutzler, New York investment bankers who will handle the financing.

• **Winners All**—According to the partners, the economic advantages of the pipelines will not be limited to their company. Bennett says, "The already heavily invested offshore producing companies will probably be relieved to know that their transportation problems are virtually solved at no additional investment cost to them. The resulting great savings, as a result of not having

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"... Collins estimates that the underwater lines can be built and operated at costs comparable to lines on land ..."

OFFSHORE OIL starts on p. 70

to lay lines for each well, should tend to accelerate their plans for further exploration and development. The producers will be further relieved in that their presently shut-in proven reserves will be marketable as soon as our line is finished. This, of course, will have the immediate effect of providing the offshore operators with more income, and hence capital to accelerate their exploration and development."

The new corporation's officials also point out that their gathering system will make available immediately in time of national emergency a high percentage of the tremendous potential from offshore wells at points where it can be used.

• **For the Industry**—When and if the project gets going, oil production will be piped through 20-in. lines into this Beaumont-Port Arthur (Tex.) area where extensive refining facilities exist, or to the Mississippi end of the line, to be sold as crude. All the gas will go to the company's terminus in Mississippi, where it will be sold to the big gas transmission lines which, in turn, will carry it to markets in the Appalachian area, the Mid-Atlantic States, and the Northeast.

According to Sammy Collins, whose company will lay the pipes, "We'll buy the gas at the wellhead from offshore producers, feed this production into our main lines, pipe it to our terminus in Mississippi, treat the gas for vapor in a \$9.8-million recovery plant we are planning, then sell all of it to the major gas transmission companies."

"The advantage to the transmission companies lies in the fact that they will be freed from the expense of gathering and, in effect, the gas available at our terminus will provide the equivalent of an enormous field on which they can draw practically half way to the point of ultimate consumption. A big supply of gas in Mississippi would be up to 600 or 700 miles closer to the point of consumption than are the present big gas fields in Texas, for example."

"Since we will have done all this for the transmission companies we will be in a position to charge them for the gas what will be a good price for us and a bargain for them and at no additional eventual expense to the consumer."

• **Foresight**—While extending a hand to the rest of the industry, the seven men who control the Offshore Gathering Corp. haven't entirely neglected their own interests.

Gathering production 25 miles out in the Gulf puts them beyond the jurisdiction of any "favored nation contracts" that onshore operators have to contend with in Texas and Louisiana. Under "favored nation" stipulations, when a transmission company buys gas at a particular price from one producer in a given area, in effect, all the other producers can ask and get the same price for their gas.

No rights-of-way have to be bought on the floor of the Gulf. This is an important expense to onshore operators.

• **Interest**—The partners are keeping mum on names, but do admit that important offshore producers "already have indicated interest in the development of the gathering system and their willingness to use it."

The actual cost-per-mile of the proposed line will be higher than for onshore lines. But, not faced with the costs of onshore rights-of-way or restrictions imposed by the "favored nation" clauses, Collins estimates that the underwater lines can be built and operated at costs comparable to lines on land.

Since FPC approval still is to be obtained, no contracts for actual construction have been let. But if the deal goes through, it is an accepted fact that the Collins Construction Co. will do the actual line-laying based on preliminary engineering by Bennett's Petroleum Consultants.

Financing plans now shape up like this: 75% of the money needed will come from first mortgage, 20-year sinking fund bonds and bank loans that will be privately placed; 15% through sale of common stock and two-year serial notes exchangeable for preferred stock at maturity; and 10% from common stock carrying voting privileges.

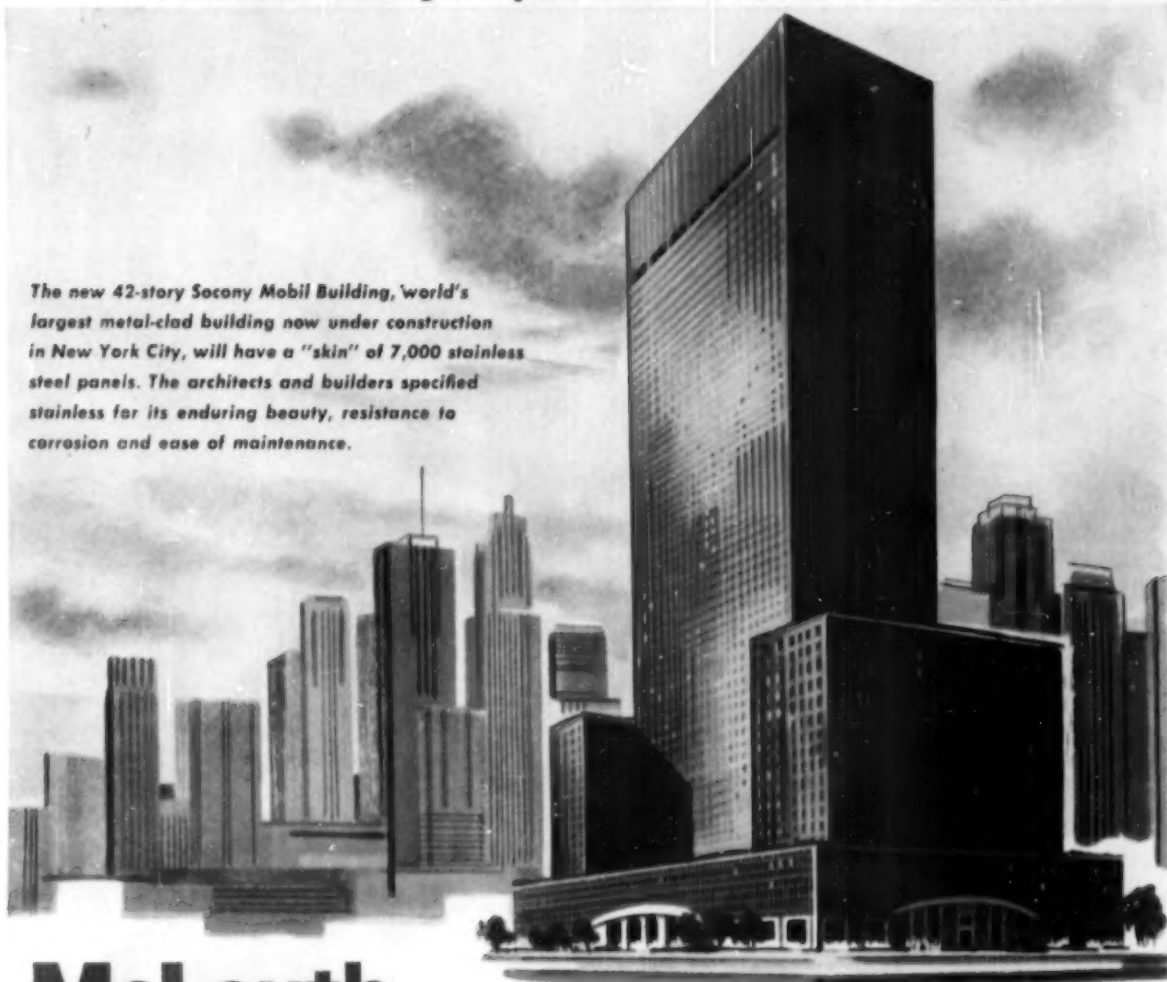
• **The Job**—Once the operation is started, it will go on day and night.

The actual line-laying would use Collins-designed special equipment. The big pipes (20 in. for oil, up to 30 in. for gas) will be coated, wrapped, given cathodic protection, and reinforced with concrete—which will provide a negative buoyancy so that pipes won't move around under water—then be buried 5 ft. deep in Gulf of Mexico mud, in water averaging 40 ft. to 60 ft. in depth.

"That doesn't worry us a bit," says Collins. "I've put 'em down in deeper and tougher water than that before." **END**

modern design specifies stainless steel

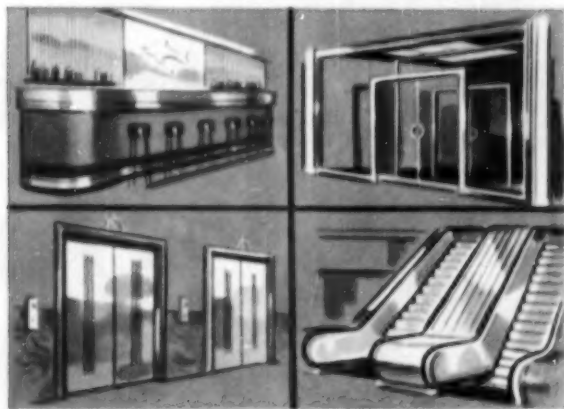
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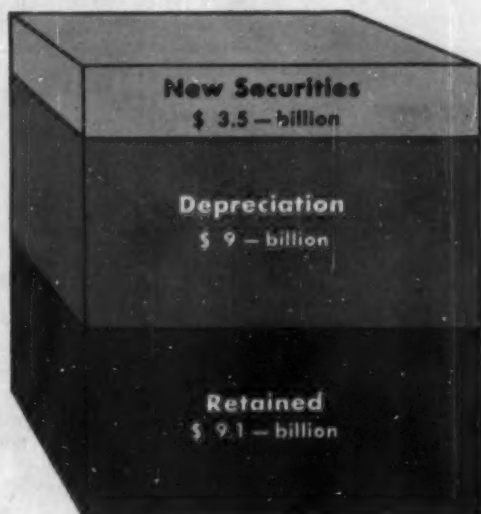
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Capital Spending: Where the money comes from

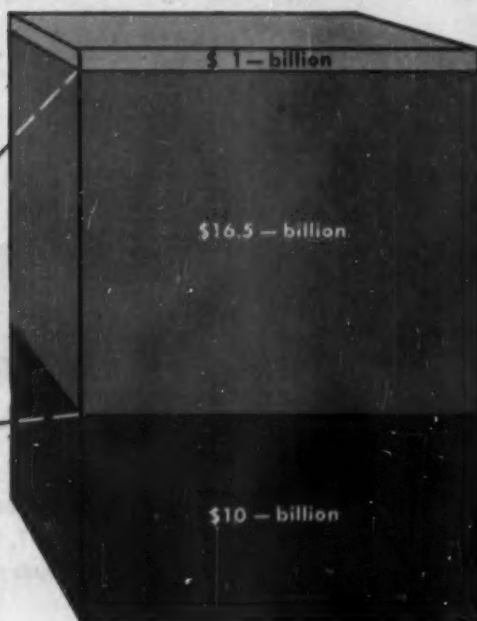
From these sources
in 1951

\$21.6 — billion



From these sources
in 1956

\$27.5 — billion



Data: BUSINESS WEEK, Estimates for Non-Financial Corporations.

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Industry Puts Up Its Own Cash

Five years ago, business launched an expansion program to meet the needs of the Korean emergency. It took extraordinary measures to finance this expansion.

First, the government granted special five-year-tax write-offs, which allowed companies to retain more of their pre-tax earnings in the form of depreciation allowances. Then business itself quickly tapped the money markets for funds, as the chart above shows.

In many cases, the extra cash flow

promised from five-year depreciation was pledged to repay borrowing. Without this special aid, the money probably could not have been raised.

Business raised prices, too. It was easy in the wave of inflation that followed the shooting in Korea. Higher prices boosted profits, so that they could make a greater contribution to financing plant expansion. These three methods—fast write-offs, new securities, and higher prices—all fitted the general business situation in 1951, a situation

dominated by war, inflation, and a sky-high boom.

• **New Wave—Now**, five years later, business is launching another wave of plant expansion. In dollar terms, it's bigger than the previous one. For corporations as a group, capital spending in 1956 will be up \$6-billion, or nearly 30% higher than in 1951. But as things look now, no extraordinary financial maneuvers will be necessary—which is fortunate because the methods that served in 1950 and 1951 probably

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wouldn't work now. One of these methods—fast write-offs—isn't generally available any longer. The government has stopped granting them in many cases. Borrowing may be tougher with the money market tighter now than it has been in a long time. Moreover, the general business situation isn't really inflationary. It's going to be tough to raise prices in many lines where competition is keen.

Yet most large companies are confident that they can finance the expenditures they plan for 1956 (chart). Here's how they figure to do it:

(1) Profits are running at very high levels, and likely to stay high at least through the first half of 1956. Even with a higher dividend payout, corporations will be able to retain at least \$1-billion more from earnings in 1956 than they did in 1951. Besides, some of 1955's earnings will carry over. Not much of current profits are being tied up in inventory, for business as a whole. So most of retained earnings can be used to finance expansion.

As the result of recent high profits, business' cash position is very strong right now—particularly in the manufacturing industries. According to the last report of the Federal Trade Commission, manufacturing corporations held 72¢ in cash or government bonds for every dollar of current liabilities.

(2) Depreciation allowances are becoming really adequate for the first time since World War II. This is partly the result of the earlier policy of five-year write-offs. Accelerated depreciation still is being charged against projects that were undertaken in 1951-1953. But more important is the way business has taken to the new depreciation methods allowed under the 1954 tax revision (BW—Jan. 22 '55, p98). For many industries, the declining-balance or sum-of-digits methods offer almost as fast a return of cash as the emergency five-year write-offs. These new methods can be applied to 100% of a project's cost, instead of 60%, the usual maximum on which five-year depreciation was allowed. As a result, depreciation charges are actually increasing faster now than a few years ago.

Total depreciation, for all corporations, is expected to jump \$2-billion in 1956 to \$16.4-billion. That will finance 60% of all planned capital expenditures, or enough to take care of all replacement and modernization.

The best way to see how much cash a company will accumulate during the year is to add depreciation to profits after taxes. The total is "cash profits," considered highly significant by many corporate treasurers. This figure determines how much can be paid as dividends and spent on plant expansion without outside financing. For 1955, cash profits for all corporations will total

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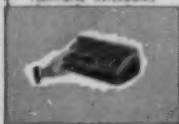
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over \$24-billion. Even if dividends go up again, it looks as though the funds generated inside the company for capital expenditures for 1956 will run \$26-billion to \$27-billion, because of the increase in depreciation. That's almost enough to cover the planned capital spending of all corporations that account for the bulk of the \$33-billion total (including unincorporated business and currently expensed items in the oil industry). The money markets would only have to provide about \$1-billion for expansion, according to this arithmetic.

• **Securities**—Of course it won't work out exactly that way, either for all corporations or for individual companies. Some cash profits will be used for additional working capital, particularly in manufacturing. Public utilities, which go to the money market for most of their capital, will be putting out plenty of new securities. Altogether, you can probably expect \$6-billion of net corporate security issues next year. But less of this will go for new plant expenditures than in 1951.

So, if present indications hold true, business won't have to call on the government for special aids—or on the money markets for really huge amounts—to finance its 1956 expansion.

But often in the past cash needs have been underestimated in early plans. For example, a new round of inflation in 1956 would siphon off a larger share of cash for higher-priced inventories and other needs.

This problem could be very real for industries like steel, where capital spending is scheduled to reach awesome proportions in 1956 and may continue on into 1957. In steel, as well as chemicals and other basic industries, the slow-back of cash from five-year write-offs will begin to diminish in 1956-57, just as new expenditures hit a peak. If inflation comes along to boost costs and working capital needs, the cash problem could become troublesome again.

• **Write-Offs Urged**—That's why the steel industry particularly is still plugging for a renewal of five-year write-offs on some facilities. That's why, too, there is so much feeling in the industry that any cost increases from now on ought to be matched by price increases.

Earlier this year, U. S. Steel's annual report urged even greater liberality in depreciation rules because:

" . . . in a few years, when the accelerated amortization amounts arising out of present certificates will have substantially dropped out, there would then arise a large gap between wear and exhaustion totals and these necessary expenditures for facilities. The new sum-of-the-digits or declining-balance methods of depreciation will be inadequate for many years to fill this gap."

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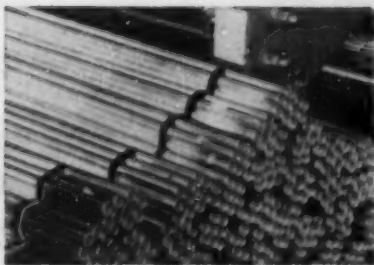
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F-350 Stake, GVW 9,800 lbs.

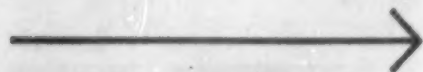
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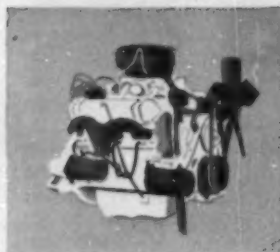
*Comparisons of all makes of trucks, based on net horse-
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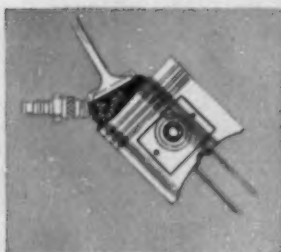
F-350 Parcel Chassis, GVW 8,000 lbs.

F-800 BIG JOB, GVW 24,000 lbs.

T-800 Tandem, GVW 42,000 lbs.



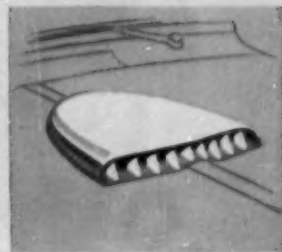
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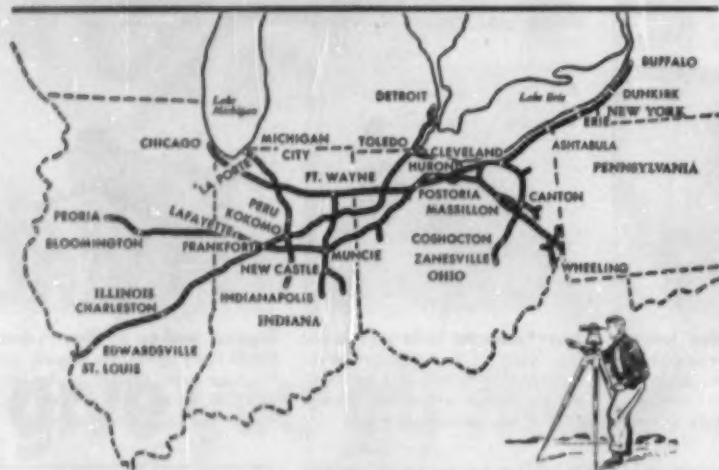
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making stand-by agreements with banks for term loans, if needed. For example, Republic Steel Corp. arranged a stand-by bank credit, convertible into a term loan at the going rate of interest, even though the company hopes to finance expansion from depreciation and retained earnings. At the today's bank rate of 3½% (or 3% to 4% on long-term corporate bonds), borrowed money is still cheaper than new stock issues for most companies. And although the money market is tight, prime borrowers evidently have had no trouble arranging for stand-by credit.

So, it looks as if business will go as far as it can toward financing expansion from internal funds, then borrow.

• **Favorable Market**—But many Wall Streeters feel that companies ought to consider new stock. Even though the cost of dividends runs a little higher than interest, they say equity money cannot often be raised on terms as favorable as those prevailing now. They reason further that every dollar of new equity creates a potential base for several dollars of borrowing later on. According to them, it's smart to sell stock now rather than take a chance on more cash needs and tighter money markets later on.

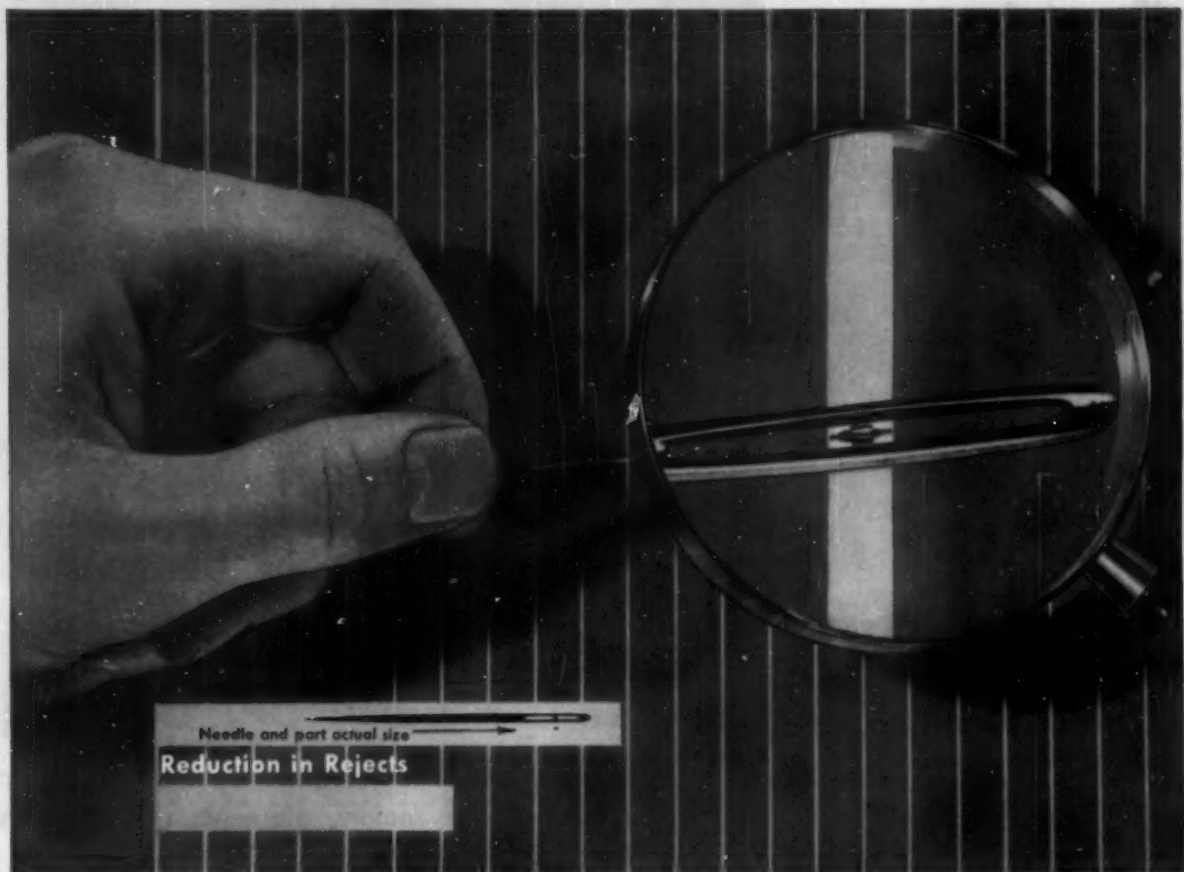
Some fast-growing companies are still playing it both ways by issuing convertible debentures. This means they borrow now for current expansion, but if the debenture holders convert to stock, there will be increased equity to support any future program. Radio Corp. of America, for example, raised \$100-million with convertible debentures on Nov. 18. If and when a substantial part of these debentures are converted (at \$50 per common share, compared to the recent price of \$47 on the Big Board), RCA will have accomplished a stock issue and can borrow again.

• **No Borrowing Worries**—Right now, though, most companies aren't worried about borrowing. Over-all, 1956 expansion may be more easily financed than any previous rise in capital expenditures. The big change is the increase in cash from depreciation.

The treasurer of one expansion chemical company put it like this: "You know, if our depreciation allowance keeps rising this way, we may be lending the banks some money."

For the long run the outlook is even better, according to the Machinery & Allied Products Institute. MAPI has just estimated that internal financing during the next 10 years will provide 95% of projected capital expenditures. Even its low estimate—90%—seems favorable to company treasurers. MAPI says that about two-thirds of the capital requirements will come from depreciation and 25% to 30% from retained earnings. **END**

Carpenter...pioneers in specially-engineered steels through continuing research



HOW FAR CAN YOU GO

in reducing rejects of critical parts?

Almost invisible to the naked eye, these tiny pinion pivots for small precision wrist watches easily fit into the eye of a small darning needle. And they are mass produced on automatic screw machines!

It's tough enough to work with such minute parts, but take a look at these really close tolerances: Over-all length is .0610" with a tolerance of $\pm .0008$ ". End pins are .004" round with a tolerance of $\pm .00002$ ", — .00000". The first steel used couldn't meet these strict specifications. Rejects ran too high.

Someone decided there must be a better steel for this job. And that's when Carpenter entered the picture. A specially-engineered Carpenter Steel was put to work. Result: fabrication improved and rejects were reduced 30%.

Why not discover how far you can go in improving

your products and reducing costs? Carpenter has a wide range of quality steels for virtually any critical application, backed by one of the country's most alert service and warehousing organizations.

Begin now by sending for a copy of our 36-page booklet, "A Guide to Specialty Steels as Made by Carpenter." The Carpenter Steel Co., 140 W. Bern St., Reading, Pa.

Are you taking advantage of these specially-engineered steels as made by Carpenter?

Matched Tool and Die Steels / Stainless Steels / Special Purpose Alloy Steels / Silicon and High Nickel Alloys / Valve, Heat-Resisting and Super Alloy Steels / Tubing and Pipe / Fine Wire Specialties

Carpenter STEEL

for product improvement



PRODUC-TROL Visual Control

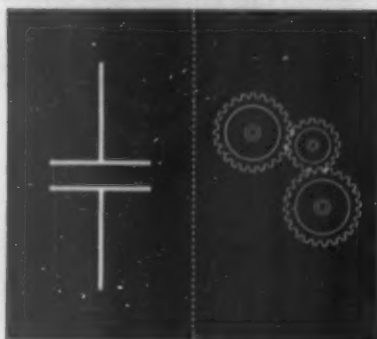
not only schedules,
But automatically checks
with TIME, LINE
and COLOR control



- Original cost and upkeep low.
- Schedules and time checks operations.
- Historical record to back it up.
- Bad situations show automatically.
- Its simplicity has put it into world-wide use.
- Analyze 100 items in 10 seconds.

Effective Tools for
Effective Management

WASSELL ORGANIZATION, INC.
Westport, Conn.



Which is simpler?

An electronic system without moving parts! It's especially true in instrumentation used to automatically indicate and control the level of any wet or dry material that flows.

A good example is the **TEKTOR** Electronic Level Controller with its electrical capacitance measuring principle. It gives positive, dependable control, yet in many applications, its probe need never touch the material.

Look into **Fielden Simplified Instrumentation** for Temperature • Level • Pressure • Conductivity • pH • Tachometry • Moisture Content • Dimensional Accuracy • Current • Voltage



FIELDEN INSTRUMENT DIVISION
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CHIEFS of North American Aviation's postwar diversification are Pres. J. L. Atwood, left, and Chmn. J. H. "Dutch" Kindelberger. They're responsible for . . .

North American's Big Change

From an assembler of airplanes, North American Aviation has switched to making many vital components and to pioneering in missiles and nuclear power.

Ten years ago, chief executives of North American Aviation, Inc., faced one of the country's biggest peacetime conversion problems. They had nearly 10-million sq. ft. of plant and nothing much to put in it.

During the war, North American had ballooned largely on its hurry-up design and production of the P-51 Mustang, one of the last of the piston-engined fighters. In number of aircraft, though not in tonnage, the company had produced more military planes than any other maker. But when the shooting stopped, so did the contracts.

Mos' other airframe makers who found themselves in the same predicament stepped up their development of new designs for military planes; some of them also had a commercial transport market. North American followed this course, too. It jumped into jet fighter production with its F-86 Sabre, built around captured German designs of a supersonic wing. And it tested the private plane market with its four-place Navion. (When the market for such planes proved to be only 10% of Commerce Dept. predictions, North American sold the Navion in 1947 to Ryan Aeronautical Co.)

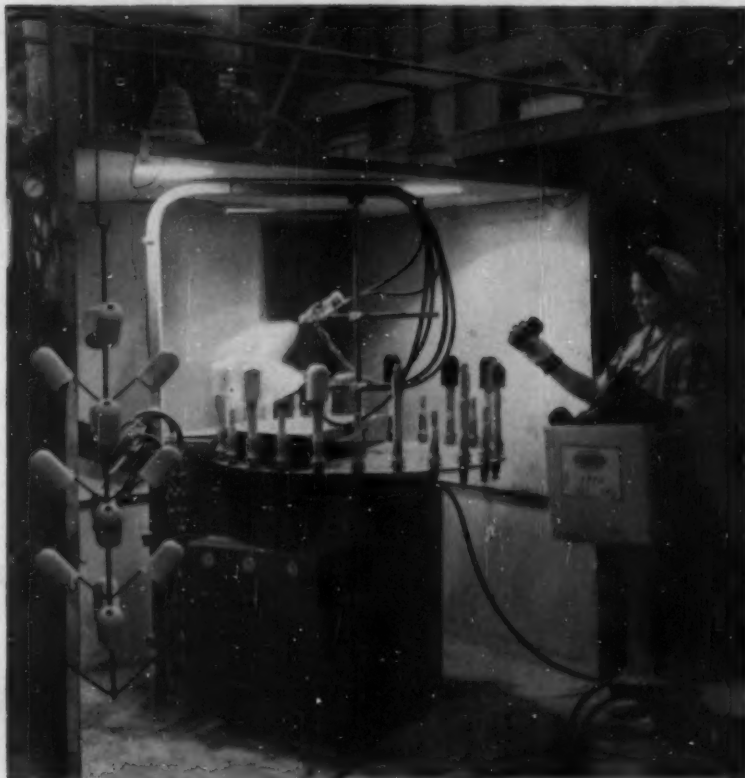
• **Unorthodox**—But North American also did two things that were unconventional for an airframe maker:

• It went into designing and building three new fields—rockets, automatic navigation and firing control mechanism, and atomic energy.

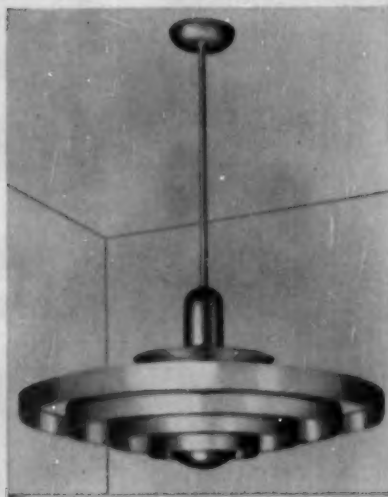
• It went into building its own components in all fields, with such success that it now sells to others many of the items that it would be buying if the company had remained merely an assembler of airplanes.

Last week, Chmn. James Howard "Dutch" Kindelberger (picture) announced division status for the development and manufacture of automatic navigation and electromechanical control systems for planes and missiles. The new unit is futuristically named "Autonetics Div." It takes its place alongside the Rocketdyne Div. and Atomics International.

• **Results Count**—The 10-year reorientation of North American Aviation appears to be paying off handsomely. The company says sales of \$816.7-million in the year ended Sept. 30 and profits of \$32.3-million bettered even the wartime highs. Profits improved \$10-million from the previous fiscal year. Total



DeVilbiss rotary machine and automatic spray guns have increased paint mileage, stepped up production at Smoot-Holman Company. Firm also uses DeVilbiss spray booths, paint heater, hose, pressure tanks, and regulator.



Smoot-Holman Circl-lite, for overhead lighting, spray-finished by DeVilbiss equipment.

Smoot-Holman triples production with DeVilbiss Automatics

... saves \$160 each day of operation

The Smoot-Holman Company, manufacturer of fine illumination equipment and plumbingware, in Inglewood, California, sprayed its products by hand for many years. With this method, the finishing department was completing about 900 pieces a day, and averaging 40 pieces per gallon of material.

Recently, the firm installed DeVilbiss automatic spray guns ... and an automatic rotary machine. Now, production has increased to 2700 pieces a day, or 300%, and one gallon of material

coats 160 pieces! The result: finishing costs have been cut \$160 each day the machine is in operation.

Smoot-Holman has been a DeVilbiss customer for 35 years. Says Joseph Disario, finishing superintendent, "DeVilbiss equipment has proved extremely reliable, and easy to service. But just as important is the personal service DeVilbiss representatives provide — training aids for our operators, and ideas that help us improve our finishing operation."

Put the experience and technical skill of a DeVilbiss representative to work for you! A look at your

finishing department, and he may be able to suggest improvements that will give you better finishes ... and at lower cost, as well.

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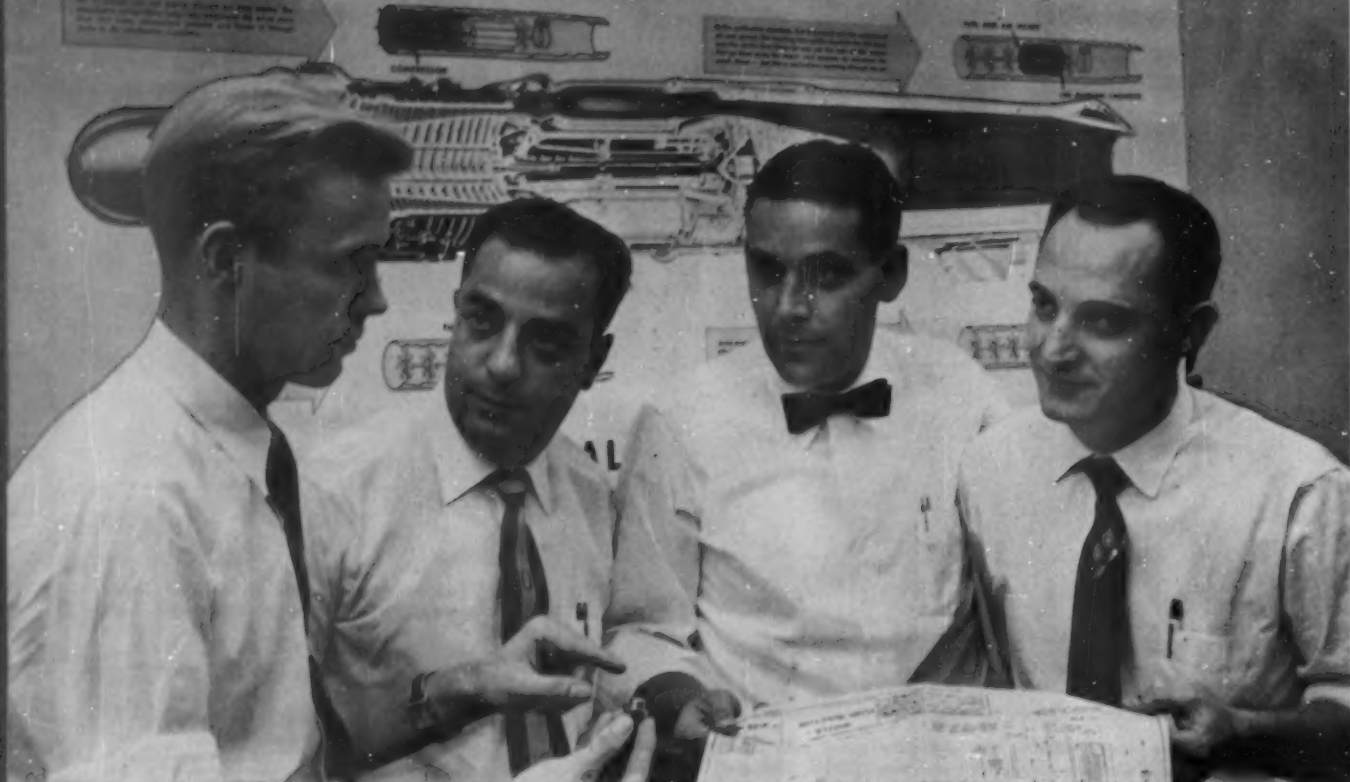
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J47 JET ENGINE with afterburner



EARLY JOB PLANNING preceded production of the G-E J47 nozzle. Here, David Nelson, design engineer; Felix Scopelliti,

production manager; William F. Steinen, president; and Ernest Tedesco, quality control director, discuss contract.

Industry benefits as G-E defense subcontractor adapts new-found skills to peacetime production

Co-operation on defense jobs between General Electric and small Newark business firm leads to new machine designs and techniques—now available to other industries

Since 1907, the William Steinen Manufacturing Company of Newark, New Jersey, had been growing slowly as a producer of screw machine parts and metal stampings. With the Korean War, however, defense subcontract orders from General Electric required swift production changes, and the small company responded with imagination and efficiency.

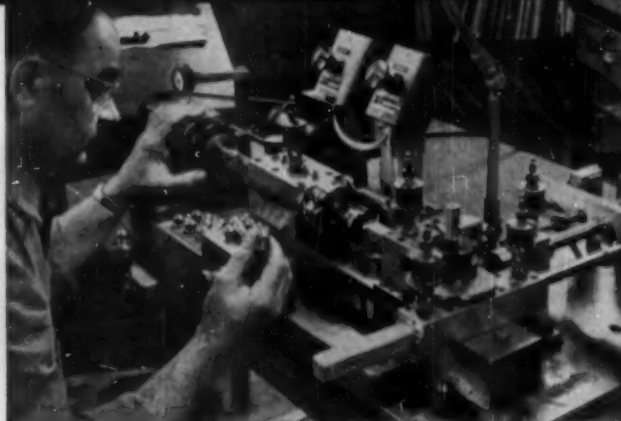
One tremendous challenge was the requirement of extremely close tolerances for G.E.'s J47 jet engine nozzle. To fulfill the requirement, Steinen hired more expert personnel, enlarged its engineering staff, designed new machines. Result: reduced unit cost, delivery on schedule, high quality, and more G-E contracts. At present Steinen is engineering and developing nozzles for even more advanced G-E engine projects.

With growth came new abilities. Exacting G-E contracts meant much more than a greatly increased employee roster and added machines. It meant the development of new skills, versatility, and capacity. And today—even though Steinen sales will hit an all-time high of \$1,900,000 in 1955—less than 10% of this is defense work. The company has smoothly switched the bulk of its production to peacetime industrial needs.

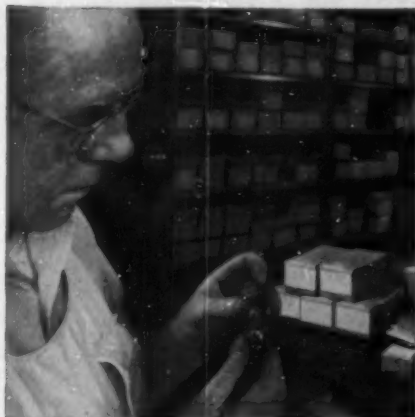
A proving ground for industrial production. G-E defense contracts have helped many small businesses "grow up" to the American economy's expanding needs. In a climate of peace, these companies are adapting to the stretch-out of defense orders from the Korean peak, matching their new capacities and standards to the demands of industry—an excellent example of large and small business co-operating for mutual benefit. 600-4



TRIPLED PRODUCTION resulted from this Steinen-built machine which cross-drills three wiring holes in jet nozzle bodies at one time, instead of singly.



ELIMINATING A SLOW HAND OPERATION, and reducing costs, this machine was specifically designed by Steinen for precision reaming of holes in jet nozzles.



MODERN PACKAGING developed by Steinen utilizes clear plastic tube in which nozzle assemblies have high visibility, and are easily selected.



SWIFT GROWTH required expanded accounting and purchasing department. William Steinen, Sr., (in vest) founded company forty-eight years ago.



VOLUME PRODUCTION on short notice is possible at Steinen because a large variety of metal stocks is always on hand in company's storage areas.



EXHAUSTIVE TESTING, such as this test of nozzle's spray angle, enables Steinen to meet the rigid standards set by General Electric and other prime contractors.

CAN SMALL BUSINESS HELP YOU?



Thousands of small businesses, like the William Steinen Mfg. Co., have furnished General Electric with practically every kind of skill and services as defense subcontractors and suppliers. Many of these companies have available production capacity, created in large part by the reduction of defense orders since the Korean War peak. This means that they may be able to apply their skills to help you with your production.

If you have a manufacturing problem or have work available for subcontracting, please write us on your letterhead stating in as much detail as possible the type of services or skills you require. We will be glad to suggest several small businesses who have done similar work for us and may be able to help you. Write to C. W. Bryant, Manufacturing Services Division, General Electric Co., 570 Lexington Ave., New York 22, New York.

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Famed for Dependability—

The St. Bernard is legendary in its service to men in need. Baltimore and Ohio Sentinel Service is a prototype of such dependability—in car-load freight service.

Sentinel siding-to-siding schedules are completely dependable—the Sentinel Automatic Records feature provides dependable information on unexpected car-interruption, and reforwarding. Shippers and receivers always know the "when," "where" and "why" about their cars in transit.

Try Sentinel Service! You'll come to depend on it too. **Ask our man!**



Baltimore & Ohio Railroad

Constantly doing things—better!

plant area is 500,000 sq. ft. higher than at the wartime peak.

Employment figures, too, show how far North American has penetrated its chosen new fields. Of the company's 61,336 employees, 12,500 are in the three new divisions: Autonetics, 7,727; Rocketdyne, 4,012, and Atomics International, about 800.

Moreover, the company has an increasing proportion of highly trained technicians. A spokesman estimates that one-third of the 61,000 employees are involved in some kind of development work. The nuclear energy staff is made up almost entirely of scientists and technicians.

• **Exploring**—In revamping North American, Kindelberger and Pres. J. L. Atwood had to do a lot of research and development work, too. Months before World War II ended, they looked at the civilian market for goods the company might conceivably produce. They found they couldn't compete. While they looked some more, they put the plant to work on the Sabre jet and the Navion.

The more they looked, the more they were led to the technological frontiers, where they would be starting from scratch along with other companies. They decided to focus on atomic energy, missiles, and aviation electronics—three fields that were developing fast when the war ended.

As in the case of the Sabre's swept-back wing, North American borrowed from German designs and data for its missile development, then carried these captured ideas still further. In 1947, the company leased land for what is now the Rocketdyne Div., and the first firing tests were made two years later.

• **One Thing to Another**—The decision of Kindelberger and Atwood to concentrate on these three new fields—as well as continuing jet aircraft production—led them to another decision.

In the past, the airframe was built around power plants, armament, and electronic gear that came from other companies specializing in such items. In the new fields, though, North American was starting at the very beginning. It must coordinate the design of components with that of the total product. Therefore, it must make some of the key components instead of buying them.

• **Electronics**—Only this year, the company announced that it was designing and building the entire fire control system of its F-86-K interceptor. Hughes Aircraft Co. had previously had a virtual corner on such aircraft equipment. North American has also developed automatic navigation and control systems for supersonic aircraft and, it was announced last week, guidance systems

PROBLEM: To Cut the Cost of Cloth Ventilating Curtains used in Mines . . .



Fulton has the Answer!

Brattice curtains control the passage of air in mines as well as providing protection from fire. They must, therefore, be fire resistant and withstand beatings from heavy traffic . . . the friction and blows from moving mine cars and machinery are brutal. Formerly it was necessary to replace damaged brattice cloth frequently. Fulton, working with major mining companies, developed a new, plastic coating for brattice. This new coating provides greater fire resistance, permits coal dust to be readily washed off by hosing with water . . . and *doubles the life of ordinary brattice cloth.*

What's Your Packaging Problem?

General Sales Office
Special Services Division
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Gentlemen:

The attached confidential letter gives full details of our particular needs.

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Fulton "WPPL"
is the answer.

Chemical products are tricky to package and handle — subject to activation by moisture in ship holds, on loaded trucks, at warehouse docks. Fulton makes burlap bags (burlap for economy) — laminated with asphalt or other adhesives to paper or plastic material (for waterproofing) to give complete protection.



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American Credit Insurance

AND

The Case of the Concentrated Risk

THIS is an example of the ability of American Credit Insurance to handle even the isolated instance of exceptional risk. It illustrates a principle which applies whether your own business is large or small.

The policyholder, a manufacturer of small electrical appliances and components already insured under a general coverage policy, was asked by another manufacturer to furnish the chief component of a well-known brand name appliance. The opportunity was unusually tempting, since demand would be continuous, the profit offered was good, and sales expense was negligible.

Nevertheless, the policyholder hesitated. Could he risk so many of his eggs in the one basket? Could he afford to tie up so much of his working capital as would be involved if the account receivable became an item past due? Previous relations between the two concerns had always been of the best. And yet . . .

The policyholder's Credit Manager recommended consultation with American Credit. After study and discussion, it was decided that increased coverage or extraordinary coverage, as riders to the existing policy, would not meet the situation. What then? A separate single risk policy was issued, granting coverage on this one account up to a total of 150 thousand dollars, with a deductible of only fifteen thousand.

Within the year, the Credit Executive's worst fears were realized. The buyer of the components was unable to move a sufficient quantity of his finished product, through being caught in production difficulties at a seasonal peak. The account was filed as a past-due item, aggregating more than 120 thousand dollars. The policyholder received a loss payment of somewhat more than 105 thousand dollars. Thus, most of the eggs in the basket that proved unsound were not even cracked, and the policyholder continued business without even temporary loss of working capital.

Whether your business is faced with many risks or only one concentrated risk, you will find new assurance in knowing that your accounts receivable have the same degree of insurance protection as your machinery, your buildings, and your product. For your copy of a new booklet: "Credit Insurance, Its History and Functions," write Department 42, First National Bank Building, Baltimore 2, Md.

**American Credit
Indemnity Company**
of New York

for its own and other companies' missiles.

• **Missiles**—This year, too, for the first time, North American was permitted under security rules to reveal that it is making the liquid-fueled rocket engine for its own SM-65 Navaho surface-to-surface missile with a 5,000-mi. range (BW—Nov.12'55,p76) and for missiles of other makers.

Only one of these other missiles has been named—the Redstone missile for Army Ordnance—but it is general knowledge in the rocket industry that North American is also building one of two engines for the giant Atlas intercontinental missile.

North American's rocket engines have attracted attention abroad, too. In August, the company signed a 10-year agreement under which Rolls-Royce of Great Britain will manufacture rocket power plants of North American's design.

• **Atomies**—Soon after the war, North American set a small staff of scientists to studying the possibility of an atomic-propelled long-range missile. When the study ran into a blank wall, the company detached the missiles experts for work in the new rocket division and gave the atomic experts a new assignment: reactor materials and technology. Within six months, the Atomic Energy Commission granted the company a contract for reactor development.

North American has built or is building seven reactors (BW—Apr.10 '54,p94). The biggest is a \$10-million sodium-graphite reactor for AEC (North American put up \$2.5-million of the total cost). It will be completed in the spring, and Southern California Edison Co. expects to convert its heat into 7,500 kw. of electricity.

The company is also building the country's first purely industrial research reactor for Armour Research Foundation at Illinois Institute of Technology in Chicago (BW—Mar.19'55,p76) and a reactor for medical research and treatment for the University of California at Los Angeles.

• **Problems**—Snaggy problems remain, despite North American's progress in so many fields. One is the shortage of scientists and engineers. Another is the company's physical growth; the Rocketdyne and Atomies International divisions are moving from Downey, Calif., to Canoga Park, Calif., and the Auto-netics Div. into new quarters at Downey.

Then, too, financing is a continual problem. Research equipment costs are high; the cheapest wind tunnel costs \$5-million, and North American is building its third. But North American is managing to produce sales of \$800-million a year and the future looks good. Its latest backlog figure is \$1.5-billion. **END**



Reynolds modern electrolytic finishing equipment is used extensively by many manufacturers for highest quality plain and color anodizing. Color anodizing by Reynolds is currently adding tremendous sales appeal to parts and trim for appliances, housewares, automobiles and other products.



Buffing, here on deep well cookers, is one type of mechanical finish available from Reynolds. Scratchbrushing, satin finishing, highlighting, embossing and other finishes are also available.



Alodine system at Reynolds is adaptable to immersion, spray or brush type finishing. Etching, brightening and other chemical finish treatments are also available at Reynolds.



Reynolds can paint entire parts a solid color, mask and paint or do paint filling in combination with mechanical finishing to supply practically any desired texture or highlighting effect.

**An important announcement
to Purchasers and Users of
Fabricated Aluminum Parts:**

REYNOLDS EXPANDS ITS FINISHING FACILITIES

**to assure even finer mechanical, chemical, electrolytic
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Reynolds existing extensive finishing facilities are currently being augmented by today's latest automatic finishing equipment. This tremendous investment by Reynolds offers you finishing facilities unsurpassed anywhere. It assures you finer finishes on the aluminum products you design. Gives your designers new flexibility in their planning. And—these new expanded facilities are backed up by Reynolds years of technical experience with practically

every finishing process and technique applicable to aluminum...and by Reynolds famous quality control from mine to finished product.

For full details on the many types of mechanical, chemical, electrolytic and paint film finishes that Reynolds offers—and on the many other services offered by Reynolds—contact your nearest Reynolds office or write direct. *Reynolds Aluminum Fabricating Service, 2085 South Ninth Street, Louisville 1, Kentucky.*

See Reynolds New Program "Frontier"—Sundays on NBC—TV.

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"Catalog of Facilities"



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**"KLIXON Protectors Save Dollars,
Build Customer Goodwill,"
Says Appliance Service Manager**

UTICA, N. Y.: Mr. Richard Henschke, Service Manager of Schwenders, Inc., knows the value of Klixon protected motors in appliances. He states:

"Despite increased sales, service calls on Klixon motor operated appliances have been so few, that we feel that Klixon Protectors should be used more extensively as they practically eliminate costly burnouts.

"Klixon Thermostats as used on heaters and automatic clothes dryers have given the same trouble-free service record. This benefits both us and our customers by added good will and dollars saved."



NEW FREE BOOKLET
"The Story of the Spencer Disc"
A truly interesting, informative booklet which gives the history of the Spencer Disc. It tells how the disc was discovered, how it operates, how it was first used and how it is now used in various Klixon Products. Write for your free copy, today.

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In Management

• • •

Mojud Battle Breaks Out Again Over Plan for New Acquisition

The battle over Mojud Co., large New York hosiery and lingerie producer with \$16.4-million in 1954 sales (BW—Nov. 19 '55, p. 68) is back in the news again with another court suit. David L. Judson, company secretary and son of Mojud's founder, has filed suit against David M. Milton, president of Equity Corp., a New York investment firm, and since Nov. 4 chairman of the board of Mojud Co.

The new round in the battle has a complicated history. In September, Judson's father sold 137,490 shares (26% of outstanding common stock and enough to give working control of Mojud) to a three-man group headed by Arthur Greene, Chicago financier. Early in November, the younger Judson brought suit against the Mojud directors installed by Greene, to prevent a proposed sale of company assets to alleged associates of Greene.

Milton then appeared on the scene, announcing that he had bought working control of Mojud from the Greene group. Milton appointed a new board, and rescinded the proposed sale. Judson, having attained the objective of his suit, dropped it.

Now the younger Judson is fighting a new proposal—made this time by Milton—to use \$2-million of the company's \$3.2-million in cash for acquisition of the Mount Vernon Co. Mount Vernon is a combination of a bridge construction, meat processing, and cold storage firm.

In this suit, Judson contends that there is no company record showing acquisition by Milton from Greene's group of ownership of the 137,490 shares Milton claims for working control of the company. Judson alleges that this stock is actually pledged as collateral for a bank of New York loan to Greene, and that because of this situation "true and precise ownership of the 137,490 shares is still in doubt.

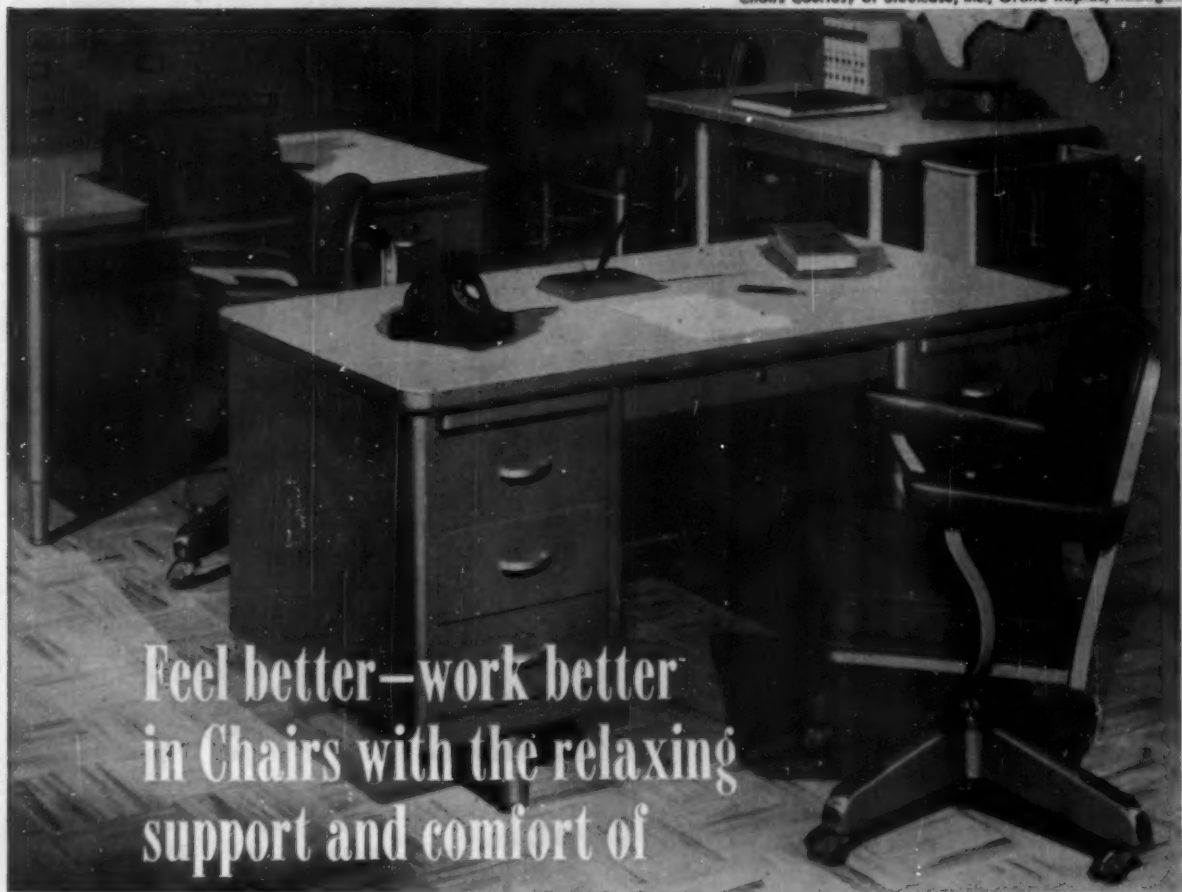
Judson further alleges that the Mount Vernon Co. is actually owned and controlled by Milton and another Mojud director. Judson also challenges the legality of Milton's action in appointing a completely new board of directors when he only claims control of 26% of outstanding common stock.

• • •

New Monthly Magazine For Foremen, Supervisors

The American Management Assn. is coming out with a new monthly magazine, for foremen and supervisors. Titled Supervisory Management, it will be aimed at sharpening the foreman's and supervisor's awareness of management problems, to help him in his personal development.

An indication of the need for such a magazine: At recent National Industrial Conference Board meetings in Philadelphia, one speaker noted a survey in which 95% of foremen felt that they correctly understood the problems of their men, but only 34% of the men felt that their foremen had a correct understanding of the men's problems. Similarly, 91% of the superiors of these foremen felt that they correctly understood the problems faced by foremen, but only 51% of the foremen felt that their



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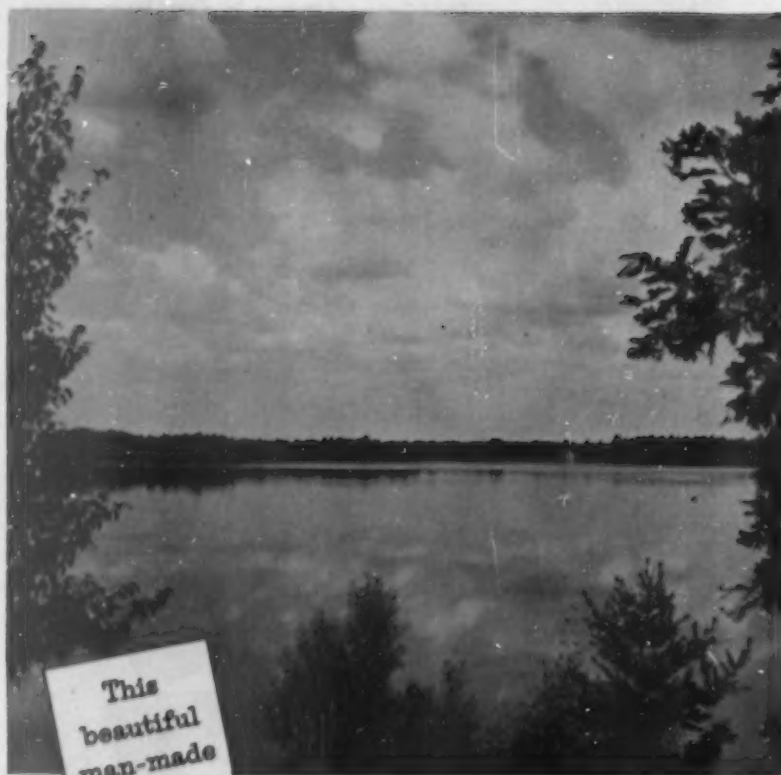


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For Mr. Executive and his staff, this finest of foams is a real investment in office efficiency. The deep, buoyant support of U. S. Koylon Foam gives the body weightless ease to offset "desk fatigue." In addition to luxurious comfort, the spring and resilience of U. S. Koylon Foam keeps cushioning always smoothly groomed, day after day—in years of use. For office chairs that let you be at your best, and always look their best—specify U. S. Koylon Foam Cushioning, to your decorator or upholstery supplier.



United States Rubber



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man-made
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assures...

...a better paper for every office need

Pictured above is Nekoosa's own lake. We "built" it to supply our paper mills with millions of gallons of the purest spring water obtainable. This purer water plays a big part in giving Nekoosa Business Papers their attractive appearance and long-lasting strength. Printers are assured trouble-free performance on today's high speed presses . . . and you get better results in all of your office machines. That's why it will pay you to always specify Nekoosa Business Papers. Your printer has them. Many, in standard sizes, are also available at your stationery store.



Nekoosa

Nekoosa Bond • Nekoosa Ledger • Nekoosa Duplicator • Nekoosa Mimeo • Nekoosa Manifold
Nekoosa Offset • Nekoosa Master-Luxent • Nekoosa Super-Luxent • Nekoosa Opaque
NEKOOSA-EDWARDS PAPER COMPANY • FORT EDWARDS, WISCONSIN

superiors were correctly informed.

If this survey is accurate, it pictures the foreman as standing alone between management and labor, both misunderstood and misunderstanding the people above and below him.

• • •

Management Briefs

Louis Wolfson's newest interest reportedly is in Scullin Steel Co., St. Louis steel casting outfit that took a sales dip from \$24-million in 1953 to \$10-million in 1954. In the same period, Scullin also took a licking in earnings, from \$5.07 to \$1.69 per share, and is presently running a little below the 1954 showing.

Chesapeake Industries, Inc., of New York, parent for subsidiaries in such diverse fields as film processing, manufacturing, advertising, and banking (1954 sales: \$27-million), has moved into the natural gas business. Last week, Chesapeake paid \$2.3-million for Portsmouth Gas Co. of Ohio, a gas distributor with annual sales of around \$1.7-million.

Hupp Corp., Detroit producer of auto parts, appliances, cooling equipment (1954 sales: \$14-million), is making two acquisitions in the air-conditioning field. One is Typhoon Air Conditioning Co. of Brooklyn (air conditioners); the other is Typhoon-Prop-R-Temp Corp., Tampa, Fla. (electric heat pumps).

Kendall Co., Boston, which sold \$93-million of textiles and surgical dressings last year, plans to expand its line by acquiring the Andrews Alderfer Co., Akron (Ohio) manufacturer of foam-fabric materials. The deal is for stock plus cash.

Merger talks between Reichhold Chemicals, Inc., \$50-million in U. S. sales last year, and Catalin Corp. of America, a chemical outfit with \$15-million in 1954 sales (BW-Oct.15 '55,p132) have been called off.

David B. Lichenstein, formerly executive vice-president of American Investment Co., St. Louis loan company, has won a federal court suit in which AIC accused him of violating his trust as an officer of the firm (BW-Mar.5'55,p80). He and his family had acquired control, while he was a director of AIC, of Liberty Loan Corp., a competitor.



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No part of the car you drive is more vital to your safety than the wheels it performs on. Yet no part is more taken for granted. Except, of course, by the people who build America's motor cars. They have your safety uppermost in mind when they specify wheels by the Kelsey-Hayes Wheel Company, Detroit 32, Michigan.

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A Major Supplier to the Automotive, Aviation and Agricultural Industries

Wheels, Brakes, Brake Drums, Special Parts for all Industry

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Wonderful the effects you get from printing in color on transparent Kodapak Sheet! *Wonderful* the way inks take to it, too!

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In Commodities

• • •

Government Looks to Midwestern Oil, Not Gulf Coast, for Emergencies

Defense Mobilizer Arthur S. Flemming has tentatively turned thumbs down on government aid for pipeline facilities to bring oil from the Gulf Coast to East Coast refineries.

Right now tankers carry oil up to the East Coast.

Since tanker movement could be cut off in case of war, the National Security Council has recommended that facilities be set up to get 1-million bbl. a day to the East Coast by some other means. American Pipeline Corp. proposed building a pipeline. Texas Eastern Transmission Corp. came up with proposals that involved converting its Little Inch or Big Inch pipelines—now used for gas—back to crude oil. Both companies wanted financial help from the government.

But the Interior Dept. feels that there may be better ways of accomplishing the same objective. Hugh A. Stewart, director of the Oil and Gas Div., points to the increasing oil reserves in western Canada, and also in the Williston Basin and Denver Basin areas. Existing pipelines—together with some now being built—could carry this oil as far east as Pittsburgh.

Stewart recommends that the government build or stockpile parts for a pipeline link across Pennsylvania—far shorter than the Gulf Coast haul—that could bring the oil the rest of the way to the East Coast.

• • •

New Titanium Price Cuts Aim for a Wider Market

The two commercial producers of titanium sponge—Titanium Metals Corp. of America, and E. I. du Pont de Nemours & Co.—have been vying with each other in bringing prices down. Both had reduced prices last April. On Nov. 1, du Pont cut its price 20¢ a lb., and TMCA followed. Just three weeks later, TMCA last week dropped its price another 30¢ per lb.—and du Pont followed. The metal now costs \$3.45 a lb., \$1.05 less than when 1955 began.

Titanium—strong, light, and highly resistant to corrosion—has an excellent potential market. But it's been having growing pains—and one of the chief deterrents to wider use has been its high price.

Titanium has certain characteristics that make it extremely difficult to process. Research on new ways of making titanium sponge is constantly going on. Meanwhile, savings from expanding production and greater efficiency in using the present high-cost Kroll process are being passed along to consumers in an effort to stimulate the market.

Herbert H. Kellogg, once chairman of Office of Defense Mobilization's Titanium Advisory Committee, and a leading expert on the metal, believes the trend to

lower prices will continue even if no basically new method of making titanium is found. In a recent article in *Engineering and Mining Journal*, a McGraw-Hill publication, he forecasts that a mature titanium industry, using the Kroll process or a derivative, will sell titanium sponge at around \$1.15 a lb. At that price, he sees consumption moving up to around 200,000 tons a year—compared to some 4,000 tons this year.

• • •

Prices of Synthetics Tumble As Battle of Fibers Warms Up

Prices of the synthetic textile fibers have taken a sharp bump downward. Chemstrand Corp. led off with a hefty 32¢ drop in the price of its Acrilan; Union Carbide & Carbon Corp. cut 23¢ off its Dynel; and du Pont, last week, let go a salvo of price cuts ranging from 20¢ to 30¢ a lb. on nylon, Dacron, and Orlon.

These price cuts did not come as a result of weak markets; in nearly all cases, producers are selling all they can turn out. What's happening, essentially, is that prices of these fibers are going through the same sort of cycle that's characteristic of any new industrial development intended for large-scale use. Prices, at first, are high; then—as production is increased, and producers push for new markets—prices come down.

All of the synthetics involved in the latest cuts, except nylon, are postwar babies. Says textile expert J. B. Goldberg: "The only direction these prices can take, in the long run, is down." Once one producer drops its price sharply, competition all but forces the others to follow.

Du Pont's price cuts apply only to its fibers in staple form (the short chopped-up lengths giving a softer, fuzzier "hand"); Acrilan and Dynel, the competition, come only in staple form. But many feel that continuous filament nylon may also come down before too long. Chemstrand is increasing its nylon production, and newcomers are entering the scene: Allied Chemical & Dye Corp. has started commercial production and American Enka Corp. is in an advanced pilot plant stage.

• • •

Kennecott Builds New Plant To Raise Recovery Rate of Copper

Kennecott Copper Corp. will build a \$5-million ore-processing plant at its Ray Mines Div. in Arizona that will give it an additional 2 lb. of copper per ton of ore.

The average copper content of ore mined in the U.S. has been sinking steadily. In the 1920s, there were, on the average, 40 lb. of copper to the ton; now this is down to about 18 lb. As producers turn to leaner ores, they are pushing hard to recover as much of the copper content as possible. Large investments for a relatively small gain in the recovery rate are now good business.

Kennecott's Arizona holdings contain about 21 lb. of copper to the ton. The new plant will raise recovery from the current 17 lb. to 19 lb. per ton.

BUSINESS WEEK Reports On



Building a Nation in the Shadow

These are Canadians; they make up a country of bankers and bush pilots, oil operators and educators, politicians and policemen, fishermen and farmers, immigrants and die-hard nationalists, industrialists and mill hands, priests and loggers and bureaucrats. They are held apart by many things and are deeply suspicious of one another on many issues. Today, there is a slogan that links them together. It's a watchword that's recognized wherever you go north of the border: "The Twentieth Century belongs to Canada."

This is the time, Canadians believe, when they must build their dream—a nation that will stand as an equal beside any in the world. But Canada has historically been a country of small population, profoundly divided within itself, dependent on outside powers.

• **Gains and Dependence**—Fifteen years of rapid economic

growth have carried Canadian hopes high. They have also produced internal strains and tensions. Many Canadians fear their progress may have been illusory—that it may have left them richer, but no less dependent than before. They are worried that their future development may be vulnerable to dangers and reversals that Canadians themselves will be unable to control. And they have begun to question whether they are on the right course, or whether their national policies do not require a radical change of direction.

The anxieties born of the boom have caused many Canadians to succumb to an attack of acute nationalism. Sometimes this takes the form of boastful pronouncements about Canada's future—"Croesus-like in national wealth, Atlas-like in enduring power"—or invocations to

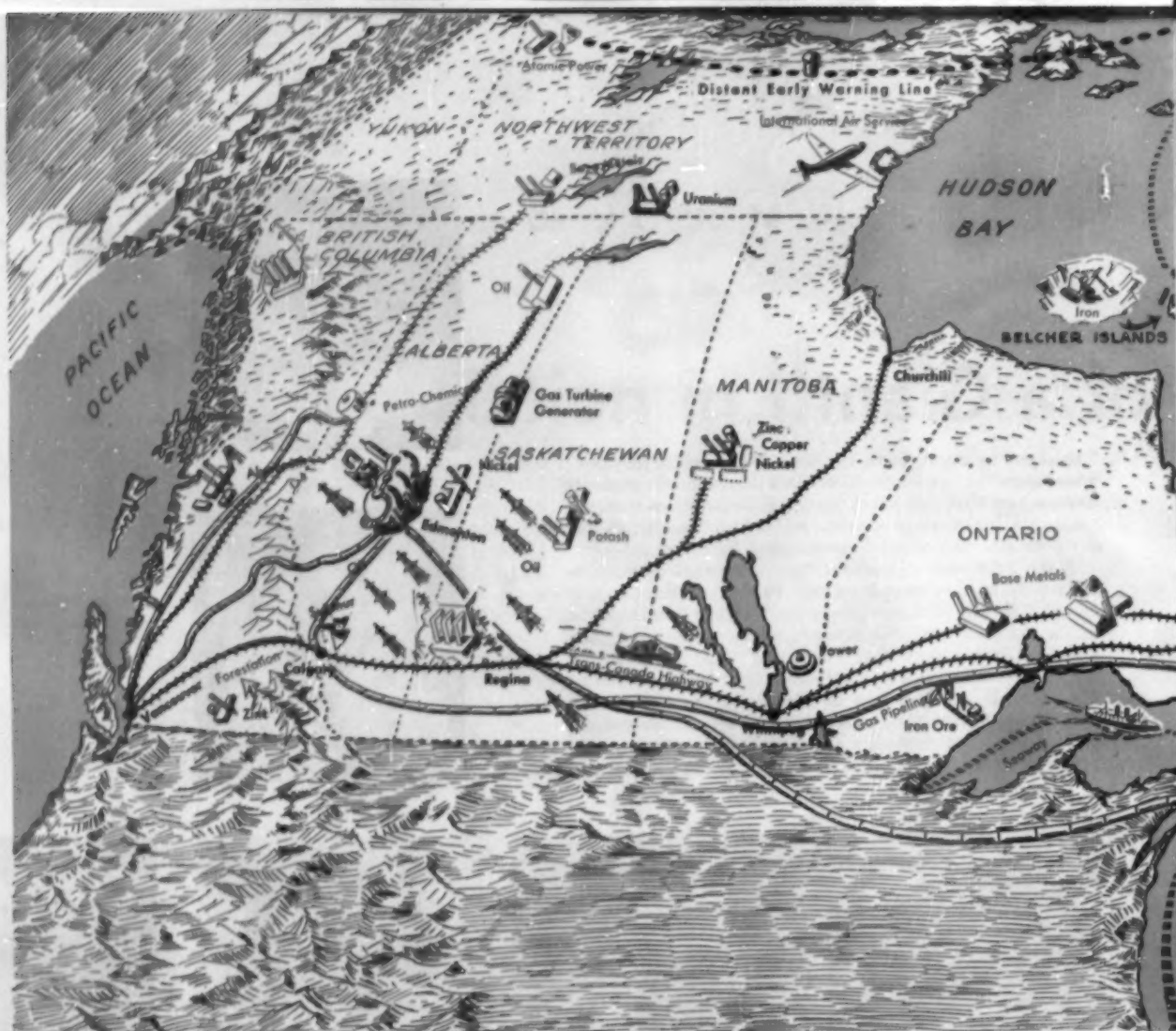


of a Giant

Canadians to march forth to "their own peculiar destiny." Sometimes the nationalism assumes a seemingly opposite form—a fear that Canada is being victimized, her resources exhausted, her national identity and culture smothered, and her economy and destiny manipulated by others.

A few years ago, Canadian fears of cultural domination from outside were strong enough to lead to the appointment of the Royal Commission on National Development in the Arts, Letters, and Sciences. The commission published a long report that concluded that "Canada has . . . paid a heavy price for [its] easy dependence on charity, and especially on American charity. . . . We must not be blind to . . . the very present danger of permanent dependence." But Canada's fears of permanent economic dependence are even more acute. Fears on this score were





From Canada's Booming Economic Development, Canadians

growing a long time before they came to a head in the mild recession of 1954 and early 1955. Then, unemployment rose, exports fell, fabricating industries faced stiffer competition from imports, and the country suffered a crop failure—and Canadians wondered whether they had reached the postwar day of reckoning.

In this atmosphere of uneasiness, the normal Canadian way would have been to play along with the problem from day to day. But this time there was a new element in the situation—Canada's new Finance Minister Walter E. Harris (BW-Apr.16'55,p178), an ambitious man who's widely considered the best bet to become the country's next Prime Minister.

Harris seized on an idea that originated with a group of economists at the University of Toronto. He proposed that a Royal Commission study the long economic road ahead and discover what the implications of Canada's economic prospects might be for basic changes in Canadian policies.

The man who had shepherded the Canadian economy for 20 years, Trade & Commerce Minister C. D. Howe (BW-Oct.29'55,p180), greeted Harris' proposal with something like derision. He refused his cooperation, said he wouldn't allow any member of his staff to serve on such a commission. Later, he ended his boycott, but not his dislike of the commission.

And so, for the second time in a few years, Canadians' fears for their national independence led to another Royal Commission—one on Canada's economic prospects. Parliament has charged it with the task of trying to foresee the next three decades of Canadian development, to prepare a basis on which Canadian economic policies can be reexamined.

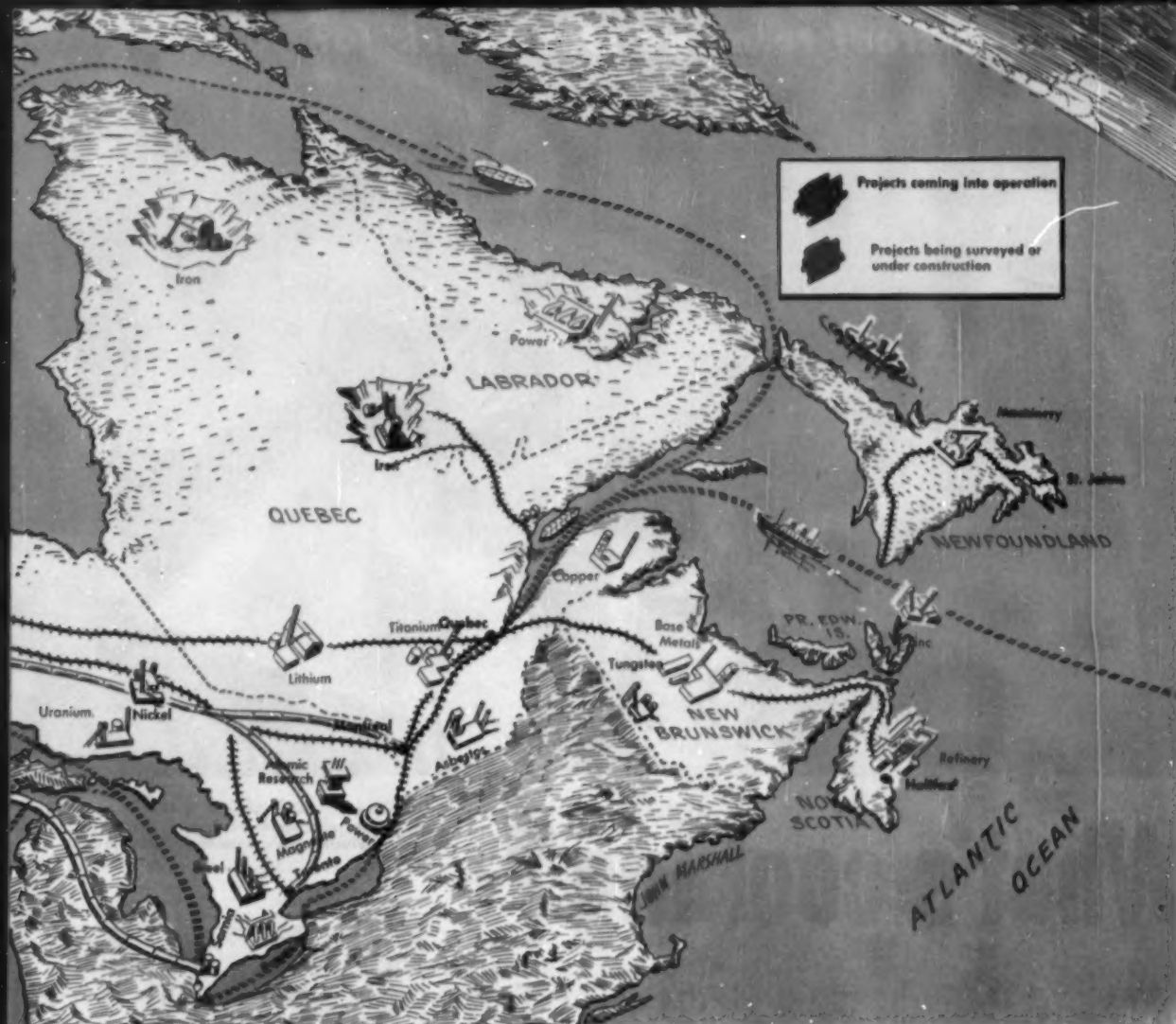
I. One Nation, Divisible

The commission has started its work at a time when Canada is full of bombastic and martyred expressions of nationalism. These expressions nowadays are directed mostly at Americans.

Canadians—including the large number not overcome by nationalist passions—cannot escape or forget the long shadow their gigantic American neighbor casts across their land. To most Canadians, that shadow appears as a mark of their continued national weakness and dependency.

Americans themselves are scarcely aware that a Canadian problem exists. At worst, they ignore Canada. More often, they admire Canada and Canadians. Many Americans have been glad to "participate in the Canadian expansion."

•Struggles for Identity—Few Americans realize what a



Are Getting a New Sense of Nationalism

source of irritation that participation is to many Canadians, or what resentment their dominant position in North America creates. Few Americans appreciate how desperately Canadians want to achieve independence and an identity of their own.

Americans won their national identity in a rush, during the Revolutionary War. But Canadians are still struggling to attain a sense of nationhood.

In their struggle to build a nation, Canadians have had the task of developing and binding together a territory that stretches over 4,000 miles westward from Atlantic fishing towns to the Pacific Coast (St. John's, Newfoundland, is closer to Antwerp than it is to Vancouver) and 3,000 miles northward from the American border to the Arctic. This land mass is greater than the whole of the U.S. and Alaska combined. A single Canadian province, Quebec, is larger than France, Germany, and Spain.

The land's dominant feature is the Canadian Shield, a U-shaped mass of mineral-rich rock, among the most ancient in the world. The Shield swings down from the Arctic Ocean, along the Western plains, to the Great Lakes, and upward between Hudson Bay and the Canadian Appalachians, to the North Atlantic.

Below the Shield is a fertile plain, lying along the St. Lawrence; west of the Shield stretch the prairies, some of

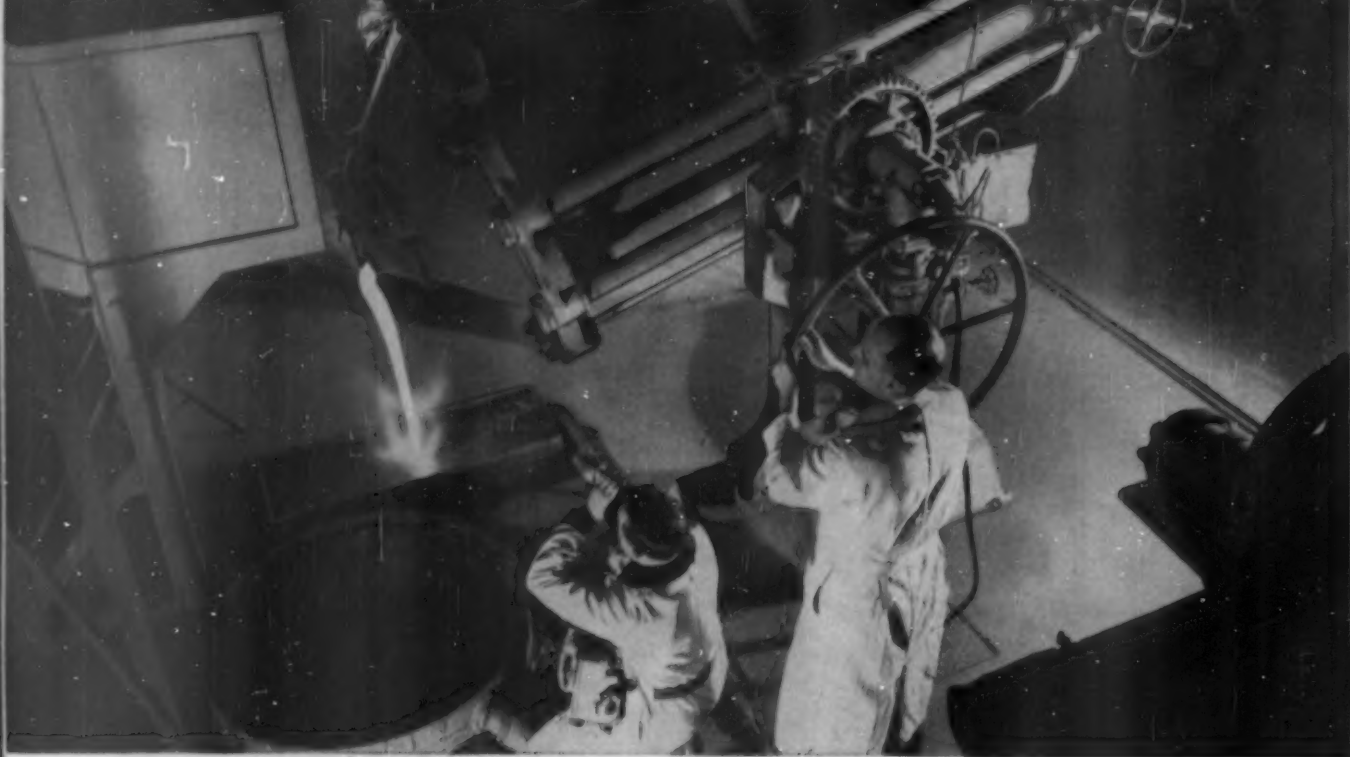
the best wheat land and grazing land in the world, below which are enormous oil and gas reserves; and west of the prairies rise the Rockies, encrusted with minerals, heavily forested.

• **The People**—To dominate this land, Canada has always had too few people. Enormous difficulties of transportation kept the Canadian people pinned down in the south-eastern corner of their land for centuries after the French settled Nova Scotia and Quebec in the 1600s. Even today, almost two-thirds of the population is concentrated in southern Ontario and Quebec.

Canadian economic history is the story of their struggle to break out of their box, to develop the bountiful resources of their land. The building of the transcontinental railroads opened up the West, brought on the first wave of rapid Canadian expansion. But today, 90% of the Canadian people live no farther than 225 miles north of the U.S. border. Now the frontier is moving north.

• **Colonial Heritage**—Long after the U.S. had shouldered its way into the Society of Nations—in a cultural as well as in a political and military sense—Canada remained a British colonial possession. Not until 1867 did Canada confederate and become a separate dominion within the British Empire. Many more years were still to pass before Canadians could declare that they had shed their colonial

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What's cooking?

Prize recipe for tough glass gives steel the stomach to resist corrosion



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Perfected by A. O. Smith research — More than 3000 formulae for glass have been developed and tested by A. O. Smith to create the *thirteen* special kinds that now give corrosion-protection to a wide range of steel products.

Just for example, consider the corrosion problems in the chemical processing industry. Here, equipment must withstand continuous attack by acids and alkalis . . . must also resist quick, punishing changes in temperature. Here, Glascote Products, Inc., an A. O. Smith subsidiary, is widely recognized for glass-lined equipment that excels in severest corrosive service.

A. O. Smith is a pioneer and world's largest manufacturer of glass-protected

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It will pay you to bring your corrosion problems to A. O. Smith. Write for free, illustrated story of glass-protected steel . . . one of the ways *we work steel to make steel work for you.*

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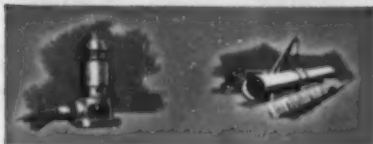
Permaglas
and Bursay water heaters

Permaglas
home heating and
cooling systems



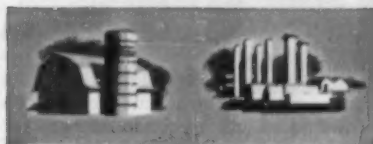
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processing equipment



Vertical
turbine pumps

Line pipe,
oil well casing



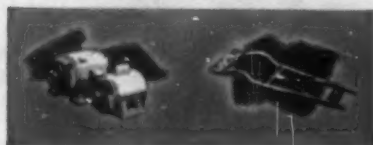
Harvestores
for the farm
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Gasoline dispensers,
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Welding machines,
electrodes, accessories



Electric motors

Automobile
frames



status. Canada attained formal equality with Britain only after the Imperial Conference of 1926.

Today, most Canadians are furious if anyone forgets that Canada is completely self-governing and pays no taxes to Britain. Queen Elizabeth II is titular head of the Canadian government, but as Queen of Canada, not Queen of England. On advice of the Canadian government, she appoints a Governor General to represent her in Canada. The present Governor General, Vincent Massey—brother of the actor Raymond Massey—is the first native born Canadian (no longer, in accordance with the Canadian Citizenship Act of 1947, a British subject) to represent the Queen in Canada.

Now that Canada has attained complete self-government, Canadians affirm that they are held to Britain by ties of sentiment, common interest, and their "heritage of British traditions." At least, more than half of Canadians would so affirm.

For, as Lester B. Pearson, Canada's External Affairs Minister, puts it, "The bells in the steeples along the St. Lawrence round which the villages cluster still ring out to remind us that Paris and Chartres are as much a part of our heritage as Canterbury and London."

• **Wide Division**—Four-fifths of the Canadian population is of either British or French origin; the other major groups are German, Ukrainian, Scandinavian, Dutch, and Polish. In 1951, the British group made up 48% of the population, the French 31%.

The largest religious denomination in Canada is Catholic—46% of total, the bulk of whom are French. The French language and culture predominate in Quebec. There, in 1951, persons of French origin made up 82% of the total population. In the Maritime Provinces they made up 23%; in Ontario, 10%; in the Prairie Provinces, 7%; in British Columbia, 4%.

Some would describe this clear division in the Canadian heritage far more bluntly than Pearson has. Canadian history is haunted by conflict between French and English Canadians. The wall between the two groups remains a serious obstacle to the establishment of a Canadian nation.

Lately there have been signs of cracks in that wall. One important force for unity is, paradoxically enough,

the increasing influence of modern France on French Canada. Although most of the older generation and the rural population of French Canada (chiefly Quebec) continue to reject France and Europe as they have done since early colonial days, many younger French-Canadians, particularly intellectuals, have made Paris their spiritual home.

The influence of Paris is generating a movement to try to turn the province's way of life away from a reactionary pattern. A trend toward greater democracy and liberalism in Quebec would do much to close the gap between French and English Canadians.

But this force, which has gained support in both the Catholic colleges and the labor movement, has far to go before its unifying effect in Canada will be significant. In fact, there is a movement, spearheaded by the Montreal newspaper *Le Devoir*, pushing in the opposite direction—toward secession and separate nationalism for Quebec.

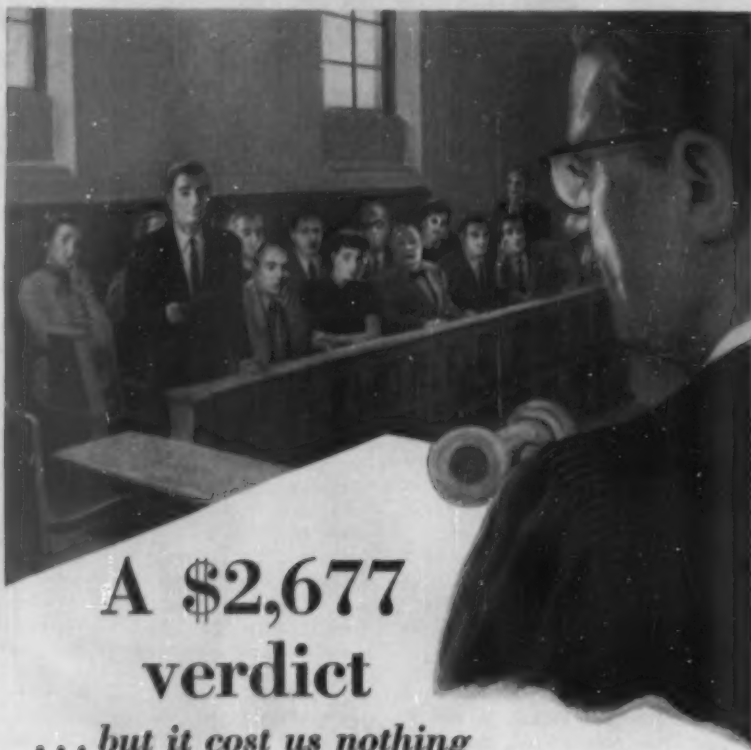
• **Political Bridge**—The key to political power in Canada belongs to the party that can bridge the gap still separating English and French Canadians. Only the Liberal Party now possesses that key. The Liberals have given Canada its three great moderating prime ministers: Sir Wilfrid Laurier, William Lyon Mackenzie King (grandson of a man who led a Canadian rebellion against Britain), and now Louis St. Laurent. The Conservative Party, due to its attempt forcibly to conscript French Canadians in World War I—a war, like all European wars, that French Canada wanted no part of—remains political poison in Quebec.

Trying to construct national policies for so sharply divided a people has left its mark on the Canadian character. "We have of necessity developed the art of compromise to a high degree," says Walter L. Gordon, chairman of the new Royal Commission on Canada's Economic Prospects. This may be one of the main reasons that Canadian diplomats are reputed to be the best in the world today. Compromise, caution, moderation—these are the most distinctive Canadian qualities.

• **U.S. Relations**—They are qualities upon which heavy demands are being placed these days, as Canadians try to build a nation beside the rough-and-tumble nation of plungers, builders, innovators, and poker players that lies to their south. Ordering their relations with the Americans has become, according to External Affairs Minister Pearson, "the most important problem of Canada's foreign policy today."

II. Uneasy Neighbors

History refuses to run out of frustrations for the Canadians in their quest



A \$2,677 verdict

... but it cost us nothing

(Based on Company File #71L8540)

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Of course, he got Workmen's Compensation. But, not satisfied with that, he sued the utility company for \$25,000 damages.

The court awarded him \$2,677, which the utility's insurance carrier paid. *And then we got a surprise.* The utility's insurance company sued us to recover the money! Their claim was based on a "hold

harmless" clause in our contract with the power company.

They won their case. The verdict could have cost us \$2,677 plus considerable legal expense. However, our Hartford Agent had been careful to write our Liability insurance to include proper coverage for contractual liability exposures.

That's why we had no problem. The Hartford Accident and Indemnity Company handled the whole situation for us. They defended the suit . . . paid the loss . . . met all legal costs.

Unusual and complex phases of insurance constantly crop up in today's business relationships. You have to be prepared for them.

Make it a point to have your Liability insurance requirements handled through a thoroughly experienced insurance agent or broker. He will be alert to such technical angles as contractual liability exposures. *And he will wisely place your policies in a company experienced in providing Liability protection in all its varied forms.*

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for independence. Having attained political equality with Britain in the Commonwealth, Canadians feel confronted by a new hazard—one they thought they had disposed of successfully long ago: domination by America.

In a sense, the American Revolution also created modern Canada. Tens of thousands of American refugees, the United Empire Loyalists, streamed across the Canadian border and became the dominant population in Nova Scotia, New Brunswick, and Ontario. Up to then, Canada's population was predominantly French.

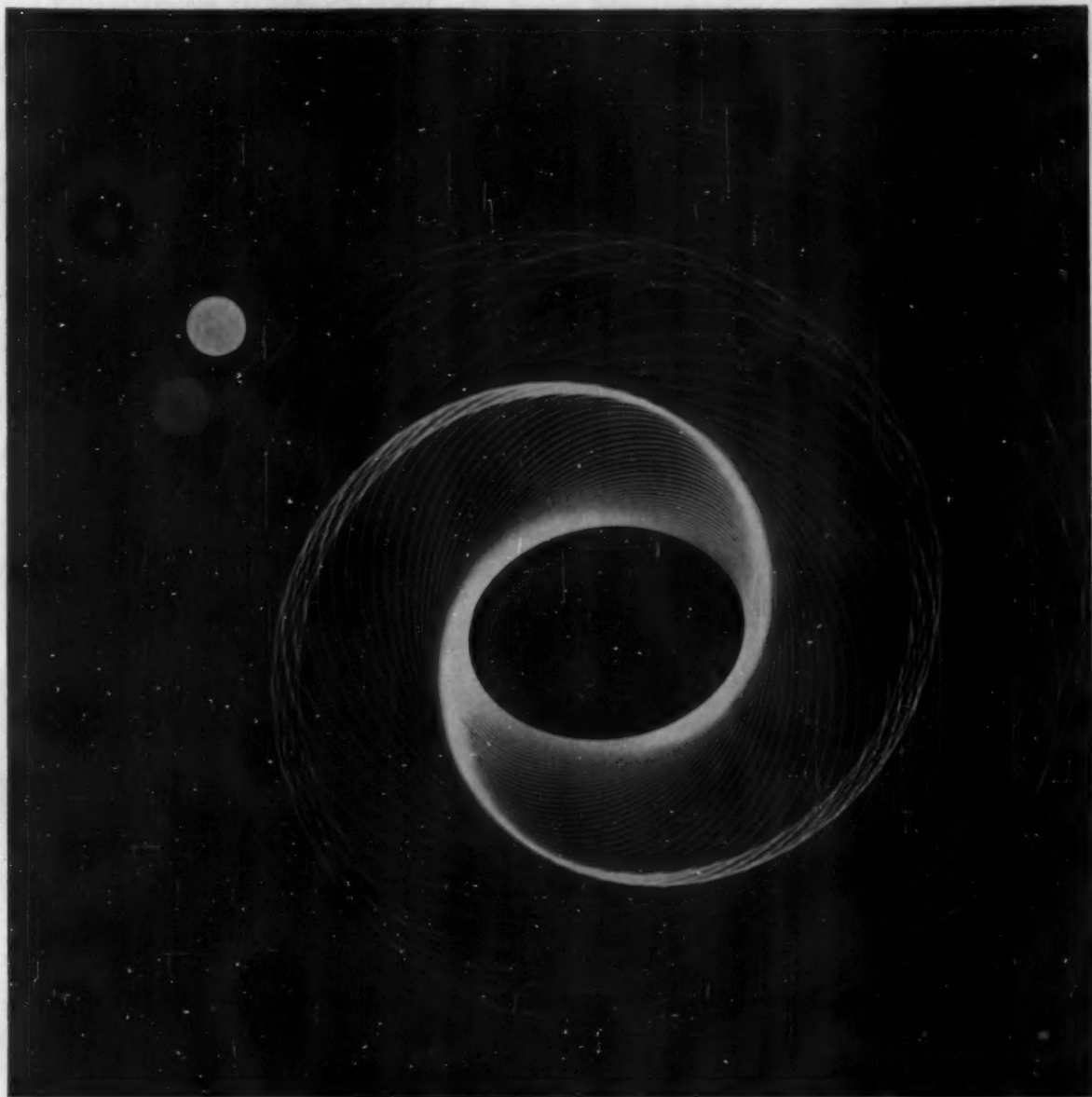
The Loyalists, Canadian historians agree, stamped into the Canadian character some traits that have never completely disappeared: resentment and envy of the U. S. and a conservatism in manners, politics, and ways of doing business, which has been reinforced by the steady immigration from Britain.

• **Years of Bitterness**—Canadian distrust of the U. S. was reinforced by many later events—the War of 1812; the conflict over Oregon; bitterness arising from the Civil War, when the Union was angered by British and Canadian support of the Confederate cause; the Fenian invasions of Canada from American territory after 1864—and many later episodes of commercial and economic rivalry.

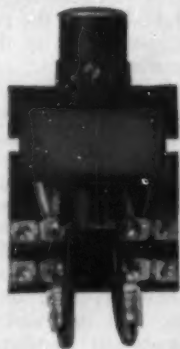
In a speech with a remarkably contemporary ring, the gentle Sir Wilfrid Laurier once declared to Parliament: "I have often regretted . . . that we are living beside a great neighbor who, I believe I can say without being unfriendly to them, are very grasping in their national actions and who are determined on every occasion to get the best in any agreement which they make."

But during the first part of this century, U. S.-Canadian relations improved markedly. Fighting on the same side in World War I forged strong political bonds between the nations. Occasions for conflict over economic issues were reduced as Canada's trade turned more into overseas than into continental channels.

• **World War II**—Economic developments during and after World War II brought about a great shift in Canadian-U. S. relations. The U. S. became Canada's biggest customer and biggest supplier. Canada received enormous U. S. capital investments. These mounting economic relations brought with them a host of problems, strains, and



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pressures to which Canadians, with their heavier dependence on foreign trade and their lesser role in the relationship, were more sensitive than Americans. Said Lester Pearson last spring: "The days of relatively easy and automatic relationships between our two countries are over."

This fall, the U.S. Ambassador to Canada, R. Douglas Stuart, made an unusual speech in which he took official cognizance of the rising tide of bitterness in Canada toward the U.S. and Americans. "The basic fact of all relationships," he said, "... is that one cannot—must not—take friendship for granted." He urged Canadians not to permit grievances over economic problems between the two countries to grow to "unmanageable proportions, and thereby weaken the bonds between us."

III. Decade of Growth

Stuart's warning, and his plea, make it clearer than ever that, at bottom, the present strains on U.S.-Canadian relations stem from Canada's boom. The great surge forward north of the border started with World War II. Existing Canadian industries, like aluminum, chemicals, and machine tools, expanded fast; new industries, like synthetic rubber, roller bearings, aircraft, magnesium, optical glass, and drugs sprang up (BW—Oct. 29 '55, p180).

And when the war ended, Canada's economy kept and even accelerated its momentum. Behind the rapid postwar growth lay all these factors: world demand for food and equipment; oil and natural gas discoveries in Alberta and other provinces; atomic energy research and development programs with their demand for nuclear fuels; Western rearmament after Korea; the cumulative effects of revived world industrial production—particularly the fast expansion of the U.S. economy; and Canada's own population growth.

• **Achievements**—These figures show the result of the postwar growth:

• Canada's gross national product, \$5.2-billion in 1938, has soared to \$26-billion. Measured in constant prices, present output is two and one-half times greater than production in 1938. (Measured the same way, the U.S.'s gross national product is now a fraction more than double what it was in 1938.)

• Canada entered the war as a nation of 11-million people. Today, its population is 15.6-million. That's a

more-than-40% increase. (The U.S.'s population increase in the same period is 27%.)

• Canadian per capita income has risen from \$360, in 1938, to \$1,321 today. (U.S. per capita income in 1938 was \$521; today it's \$1,970.)

The basis for these gains is the enormous expansion of Canadian physical plant and equipment. The buildup of the country's productive capacity has already brought a flood of projects into operation. And every month, the buildup takes another step forward. The most important projects are those that give Canadians a chance to profit from their land's natural resources: oil and natural gas, water power, forests, and the vast wealth in iron ore, nickel, copper, zinc, asbestos, potash, magnetite, tungsten, lithium, gypsum, uranium, and titanium. Heavy investment is going into new power plants—and Canada means to use atomic as well as hydroelectric power.

Boom in these departments makes for boom in others. To handle the increasing flow of production Canada is expanding its transport system through projects like the trans-Canada oil pipeline, the planned gas pipeline, the St. Lawrence seaway (in cooperation with the U.S.), and extensions of railways, roads, and air networks.

• **Feeding the Growth**—What paid for all this development was an unusually high rate of investment. During World War II, about \$4.5-billion was invested in Canadian industry; that sum more than doubled Canada's total pre-war industrial investment. In nine post-war years, from 1946 to 1954, investors put another \$29-billion into Canadian industry. Since the war, total Canadian investment (including outlays on housing, utilities, and agriculture as well as industrial capital spending) has averaged about 20% of the country's gross national product. Since 1952, that ratio has topped 24%. This is one of the highest investment rates in the world. It roughly matches that of West Germany, and is considerably higher than that of the U.S., where the rate is about 15%.

Put the picture of Canada's postwar growth back into old economic terms and you see, then, that the expansion was powered by:

• The supply of a tremendous amount of capital investment.

• The demand of the world for Canadian raw materials.

International demand was certainly the primary force. It stimulated Canada's raw material industries. There, it generated extra Canadian income. This bred expansion in secondary industries and service trades. And this rounded out in faster urbanization and a boom for the construction industry.

• **Official Aid**—But world demand for

Canadian raw materials wouldn't have produced the nationwide boom if Canadian economic policy had not been geared for the task. The government encouraged private enterprise, promoted freer flow of commodities, capital, and new industrial techniques into the country.

These economic policies worked well. But they brought with them two fresh developments—and these lie right at the heart of Canada's present unrest:

• The first is the vast increase of foreign, particularly American, ownership and control of Canadian manufacturing and mining industries. Most recent available Canadian government figures show that in 1952, foreigners owned 59% of all Canadian mining, smelting, and petroleum exploration and development industries. And foreigners, in the same year, owned 46% of all Canadian manufacturing industries.

• The second is the big shift in the pattern of Canada's international trade. Prewar, 34% of Canadian exports went to the U.S., 40% to Britain. In 1954, 60% of Canadian exports went to the U.S., only 17% to Britain.

IV. Who Owns Canada?

Spinning around in Canadian minds, these two facts have generated much heat, lots of smoke, and little light. Now and then a Canadian will cool down sufficiently to state the issue clearly. Here's what the president of Western Ontario University, G. Edward Hall, has to say about it:

"There is a considerable body of Canadian opinion that feel U.S. corporations are beginning to control the economic future of Canada. If that were so it obviously would be inconsistent with Canada's own future. We could not permit that to happen.

"Another body of opinion is convinced that Canada would not be enjoying its present enviable position had it not been for U.S. capital and, indirectly, the technical skills that accompanied that capital."

What are the facts?

Foreign investment in Canada totaled \$11.4-billion at the end of 1953. This was about 15% of the country's total investment.

The Canadian-financed 85% included practically all the country's housing, roads, schools, defense installations, most of the public works, most of the services and merchandising, and a sizable share of the manufacturing plant.

But the 15% financed by foreigners—overwhelmingly (\$8.8-billion of the \$11.4-billion) Americans—was tied up in the heaviest share of petroleum, aluminum, iron ore, and base metal developments; in a substantial share of the pulp and paper industry; and in



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Two plastic moldings plus a small stainless steel shaft form this compact, efficient, long-lasting pump. It's a pump that cuts costs for both maker and user.

Inexpensively molded of Tenite Polyethylene, it is simple to fabricate, assemble and attach to an electric motor. Any waste material can be almost completely salvaged.

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some other industries like automobile and chemical manufacturing.

• **American Stake**—Of the \$8.8-billion that U. S. investors had put into Canada by the end of 1953, \$3.2-billion was in manufacturing, including oil refining; \$1.3-billion was in mining and smelting; \$1.2-billion in other direct investments; \$1.9-billion in government securities; and \$1.2-billion in public utilities. American ownership is still growing. Provisional estimates for 1954 show that by the end of last year U. S. investments in Canada were up to \$9.5-billion—a gain of \$700-million in a year. And direct investment—up by \$520-million—gave the over-all gain its biggest push.

Canadians have long been accustomed to living with a sizable share of foreign investment in their country.

In 1939, foreigners owned 40% of Canada's mining and smelting industry, with U. S. citizens owning 31% of the total. But in 1952, foreigners owned 59% of the total, and U. S. residents held 53%.

Prewar, foreigners owned 42% of Canada's manufacturing industries, and 34% of the total was held by U. S. citizens. In 1952, foreign ownership of this sector was up to 46%, and U. S. citizens held 38% of the total.

It's the latest figures that alarm Canadians. For although they're used to foreign investment in their country, they're distressed by the concentration of U. S. ownership and control in mining and manufacturing—the most dynamic part of the Canadian economy, the part that's based on their country's richest national assets.

• **Exercising Control**—Nor is it just the dollar magnitude of outside ownership of their industries that disturbs Canadians. They resent the failure of many U. S.-owned companies to report separately on the profits or sales of their Canadian operations. And they are deeply concerned by charges that many U. S.-owned companies are excluding Canadians from participation in their work—either as members of the companies' management or as shareholders.

The vice-president of one of Canada's oldest investment houses reports that of 4,253 companies operating in Canada that are branches or subsidiaries of foreign companies, only 2% have Canadians as members of their boards of directors.

Some critics have begun to shout that "foreign owned business is milking Canada dry." Their cry covers more

than just depletion of their country's resources. For instance, Pres. Hall, of the University of Western Ontario, cites the case of a Canadian company, a subsidiary of a U. S. outfit, whose board of directors is predominantly American. The company's stock was selling at \$14. The board declared a \$9 dividend. The only two Canadians on the board resigned in protest. But the dividend went through. Says Hall, "To pay it, they took some \$6.3-million out of the company's working capital and reserve."

Charges like these are making many Canadians, in low and high places, react to absentee ownership and management in something like the classic terms of the French-Canadian epic, *Marie Chapdelaine*: "Strangers have surrounded us whom it is our pleasure to call foreigners; they have taken into their hands most of the rule, they have gathered to themselves much of the wealth."

• **The Other Side**—But not everybody north of the border blasts Americans as imperialists for their role in developing the important and growing mining and manufacturing sectors of their country's economy. Many, like J. Douglas Gibson, of the Bank of Nova Scotia, assert that Canadians "are fortunate to have such a large U. S. participation. It has meant that many developments have gone ahead much more rapidly and efficiently than would otherwise have been possible. We need to import knowhow as well as money from the U. S. and the two very frequently come together."

Gibson has allies for his view. Some of these put the blame for limited Canadian ownership in the vital mining and manufacturing industries on Canadians themselves. They say Canadians have been too conservative, too slow to recognize the potentialities of their own land. They have preferred to put their money into "safe" bonds, and have shied away from "risky equities." And, they add, Canadians seem to have preferred investing vast funds outside Canada. Canadian long-term investments abroad, which amounted to \$1.4-billion in 1939, were up to \$4.1-billion by the end of 1953. In 1953, \$1.1-billion of Canadian capital was invested directly in U. S. industry.

• **Hope for Autonomy**—It's the hope of many, including important Canadian government officials, that Canada will eventually liquidate its foreign debt and that Canadians will assume greater control over foreign-owned investments in Canada. J. E. Coyne, governor of the Bank of Canada, says "Canada has largely bought back or paid off foreign holdings of Canadian government securities."

"The next stage will be the repatriation of corporate securities, foreign holdings of which are mainly in equities."

Gov. Coyne holds that the trend of the future will be toward the "Canadianization of our economy." And this trend, he says, will bring greater autonomy and independence for Canadian management.

V. Tied by Trade

But even if these predictions came true, they would still not give Canadians all that they're seeking these days. Some say there is an even more disturbing postwar development than U. S. ownership of key Canadian industries. It is the degree of Canada's dependence on trade with the U. S. Today, trade across the border accounts for nearly two-thirds of Canada's exports, more than two-thirds of its imports.

Many Canadians think:

- A downturn in the U. S. would whipsaw Canada's economy.

- American tariffs impede balanced Canadian economic growth. They encourage exports to the U. S. of raw and lightly processed materials, shut out finished goods. This, Canadians say, keeps Canada a "hewer of wood and drawer of water."

- Unless Canada's secondary manufacturers gain access to the U. S. market, there will be chronic unemployment in the growing Canadian urban centers.

- U. S. farm policy is wrecking Canadian agriculture by encouraging enormous surpluses, then dumping them or giving them away to Canada's own customers.

- Canada gets the short end of the trade stick, because its tariff policies are liberal while America's are protectionist.

From these charges they draw the conclusion that Canada must make itself less dependent on trade with the U. S.

- **Disputed Case**—But the charges on which that conclusion is based run up against some American rebuttals:

- Canada's economy kept climbing all through the 1948-1949 recession in the U. S., dipped only 0.7% in the 1953-1954 downturn when the U. S. gross national product declined by 3.8%.

- Canadian manufacturing and service industries have more than kept pace with the growth of the country's primary industries.

- The U. S. has largely held the line against protectionist pressures. Of many thousands of commodities on which the U. S. granted tariff concessions to other nations in the last five years, only 61 became subjects of applications for escape clause actions. The Tariff Commission sent only 16 of these to the President. And he invoked the escape clause in only five cases. Only three of these cases have occurred since



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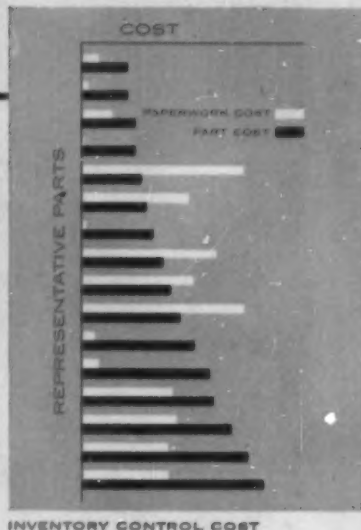
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By-product achievements

ON THE WAY TO AUTOMATION

The chart pertains to the inventory control operations of one of our industrial clients. It shows that, for a significant proportion of parts used in the manufacturing plant, the cost of paper work required to keep track of the part equals or exceeds the cost of the part itself.



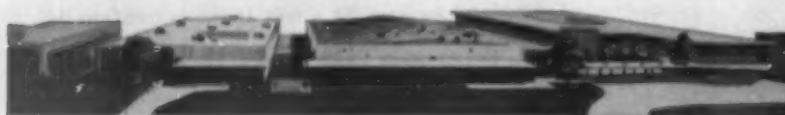
This was revealed in the early study phases of a program to apply modern automation techniques to the production control operations of a large manufacturing company. To ensure that the program would result in a combination of equipment and procedures that would be well-tailored to the client's specific needs, we started with a step-by-step analysis of each aspect of the customer's existing procedure.

The inventory control problem was one of a number of interesting discoveries that resulted when an analytical appraisal was made of the effectiveness of existing methods in terms of the over-all objectives of the business. Needless to say, the new combination of production control equipment and procedures will incorporate inventory features in which more appropriate, and therefore less expensive, control is used on low priced parts.

The significant fact is this. While the chief goal of this program is to bring to the customer's over-all production control operations the great improvements of modern automation techniques, significant increases in operating efficiency have already been made by interim modifications "along the way to automation."

In this specific instance, the Ramo-Wooldridge project team, in cooperation with the customer, has installed and monitored simplified procedures that have already reduced the over-all cost of production and inventory control paper work by 40 per cent. The annual savings and improvements in efficiency from the several by-product developments of this type that have already been put to work for this one client are much more than paying for the continuing program leading to major automation improvements.

Thus, while automation may be the primary objective, the accompanying quantitative analysis of a company's operations, which characterizes the proper systems approach, frequently leads to major benefits from improved methods and procedures discovered ON THE WAY TO AUTOMATION.



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Pres. Eisenhower took over at the White House. These cases covered watches, bicycles, and clover seed.

• Canada is no low-tariff country itself. Canadian rates are frequently as high as, or higher than, American. For instance,

(Most-favored-nation rates)

	U. S.	Canada
Bicycles	11½-22½%	25%
Refrigerators	13½%	20%
Typewriters	Free	20%
Automobiles	10%	17½%
Radios	12½%	20%
Cereals	5%	20%
Malleable iron castings	10%	20%

• The U.S. has tried to cut agricultural surpluses more than Canada has. In the past four years, the U.S. reduced its harvested wheat acreage by 34% (24-million acres), Canada its seeded wheat acreage by 17% (44-million acres). These figures are not exactly comparable, but they are the best obtainable.

Some Americans feel that Canada wants to get something for nothing from the U.S. in trade policy. If U.S. and Canadian tariffs were both eliminated, they say, many Canadian manufacturing companies—far from invading the U.S. market—would be smothered and wiped out by U.S. firms. Many Canadian industries, they maintain, are kept alive by the present structure of Canadian tariff rates. And pressures from those industries prevent Canada from moving toward a more liberal trade policy.

VI. The Way Ahead

All these arguments and counter-arguments over trade and tariffs, industrial ownership and control, degree of balance in the national economy, and over-dependence upon the U.S. might have remained important but undramatic questions in Canada but for the public pressures that bore down on the Canadian government in 1954 and early 1955. That was the time when a mild recession set off fears that the postwar day of reckoning had come.

Right away, all the central dilemmas of Canadian economic policy became matters of hot public interest. The fast-spreading reaction of Canadian nationalism, plus the moves of Finance Minister Harris made it seem that the



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normal Canadian way of avoiding cataclysmic answers to cataclysmic questions wouldn't prevail this time.

• **The Big Dilemmas**—Here are some of the dilemmas that Canadian economic policymakers face:

- If we cut economic dependence on the U.S. will we retard Canadian development, jeopardize the flow of U.S. research and technology into Canada?

- If we increase protection for domestic industries, will we endanger our exports, by restricting foreign earnings of Canadian dollars and by increasing our costs? After all, the export industries have powered the boom.

- Should we aim at a more balanced economy, one less dependent on foreign trade, or is it better economics to let resources go to their most profitable uses, no matter how unbalanced it might be?

- **Masterminds**—To tackle such questions the Royal Commission on Canada's Economic Prospects has gathered a powerful staff.

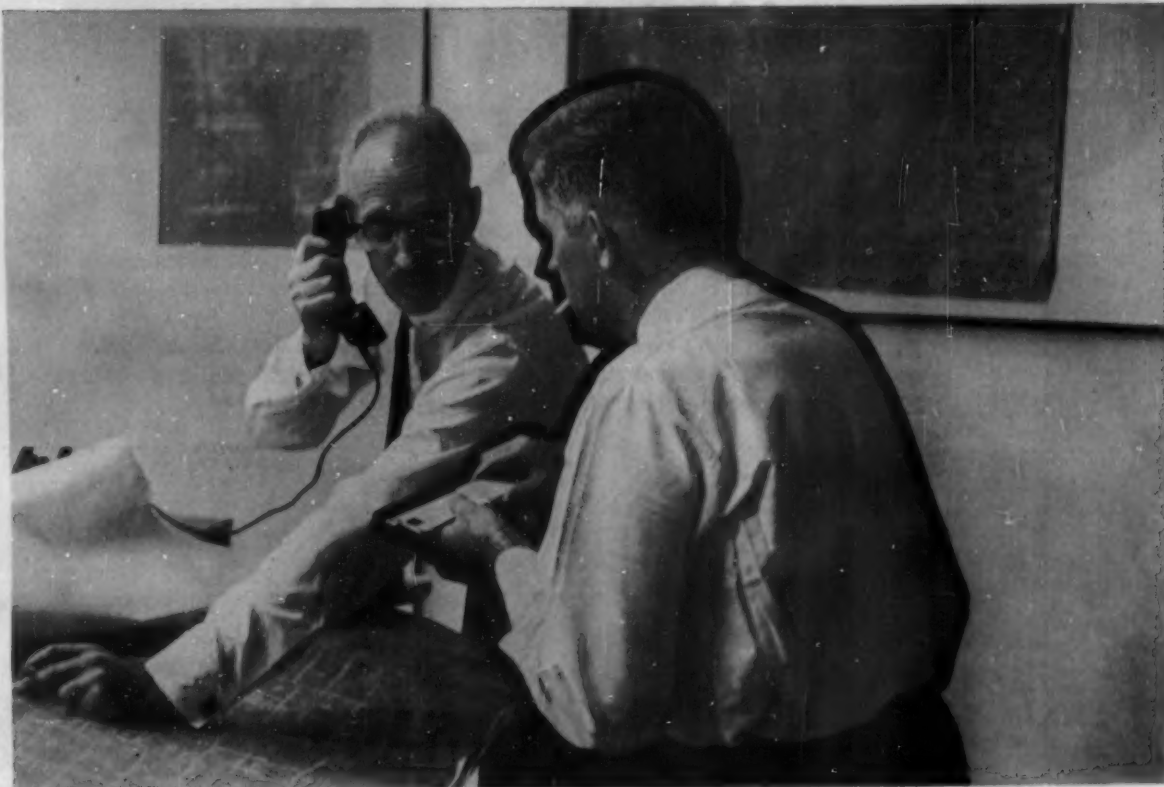
Prime Minister Louis St. Laurent named as commission chairman Walter Lockhart Gordon, a Toronto management consultant; and as commissioners Omer Lassier, professor of economics and forestry legislation at Laval University; Albert Edward Grauer, president of British Columbia Power Corp.; Andrew Stewart, president of Alberta University; and Raymond Gushue, president of Memorial University, at St. John's, Newfoundland. As secretary and research director, the government named Douglas V. LePan, who had been minister-counselor of the Canadian embassy in Washington.

Commission Chmn. Walter Gordon is an extremely cautious man, shy of press and public. He is keeping secret his views about the conclusions the commission might reach. He's even refusing to say what particular studies are being made by and for the commission—although it's easy enough to find out about this, since virtually every important Canadian financial, industrial, labor, and economic institution is being drawn into the commission's study. The work of studying, researching, and reporting will last another year.

The government has provided the commission with \$300,000 out of this year's budget, will probably give it about the same amount next year.

- **Questions**—Chmn. Gordon cites the

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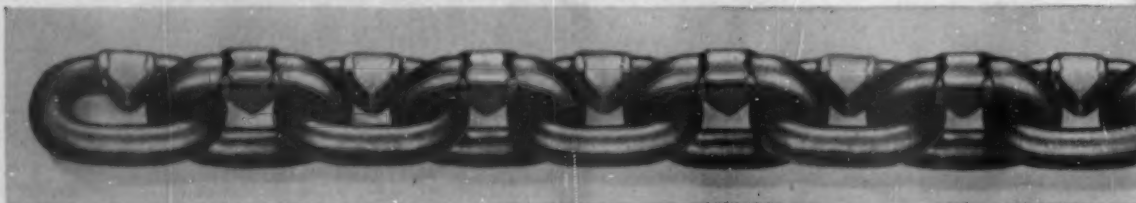
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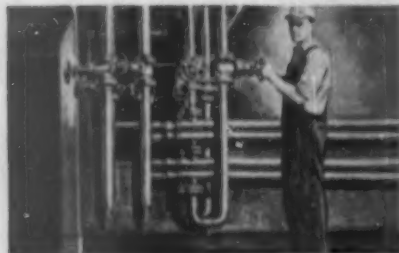
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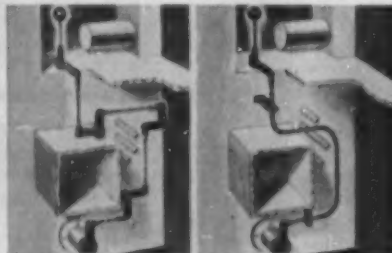
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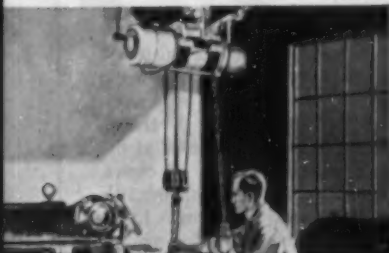
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following as some of the "most interesting questions" for which it will be seeking answers:

- How large is the population of Canada likely to be? What will be the size of the working force, and how will it be employed?

- What have we in Canada in the way of energy sources and raw materials, including forest products and minerals, and what is the demand for them, both domestic and foreign, likely to be?

- What developments can be expected in agriculture and fishing, and what will be the demand for the products of these industries?

- What is the probable future for our secondary manufacturing industries—and of the people employed in them?

- To what extent will the Canadian economy be tied to, and integrated with, the economy of the United States?

- To what extent may we expect Canadian industry to be controlled by nonresidents?

- Will certain areas or regions in Canada develop more quickly than others?

The answers the commission comes up with are bound to carry a great deal of weight. Canadian Royal Commissions report directly to the Government, which, in their parliamentary system, is synonymous with the majority party of the legislative branch. On the basis of the commission's report, says Minister Harris, "we shall be better able to review our current policies, revise or modify those which may have served us well in the past but may not be so well adapted to the coming decades, and press forward those which seem likely best to serve our future."

- **The Likely Answers**—It may well turn out that the commission's long look at trends and prospects will show that the "natural" course of events will solve some of the dilemmas of Canadian policy, and that radical short-run solutions would be hazardous.

Canada is seeking greater economic independence. And these trends make it seem likely that Canada will achieve its aspirations:

- Canada has been growing, not more, but less dependent on foreign trade. In 1926, her exports amounted to 31.2% of her gross national product; in 1938, to 25.9%; and in 1954, to 21.4%. This trend will probably continue.

- The home market for the products of Canada's farms and fabricating industries will expand considerably. Population is growing at the very rapid rate of 2½% a year, will probably reach 25-million by 1975. Population growth, plus growing income from productivity gains at about the past rate of 2% a year (which will more than double the country's GNP by 1975) should push the growth of secondary and service industries. That would bring ample jobs for Canada's labor force. From 1938 to 1954, for instance, Canadian exports, in constant prices, have increased 74% while its total output of goods and services has increased more than 121%.

- U.S. investment in Canada is likely to level off. With its relative slackening, there will be some decline in the flow of U.S. goods to Canada. One factor in the slackening very likely will be Canadians' more jealous guarding of their resources for their own development. The future may hold in store more moves like Canada's refusal to permit Aluminum Co. of America to develop huge facilities based on the headwaters of the Yukon. Further, as foreign-financed projects prove out, Canadians probably will invest more heavily in their own industries, reducing the extent of external control.

- As great Canadian projects now in the works come into operation, and as countries that have been short of dollars finally reach convertibility and seek Canadian materials to promote their economic development, Canadian foreign trade will be increasingly diversified.

- Imports will decline relatively as Canada achieves self-sufficiency in oil, as gas flows to the east to replace coal, and as Canadian manufacturing production grows.

- And, as population and wealth grow, and Canada comes of age, Canadian nationalism probably will diminish.

It's possible that a long and careful look ahead, like the one the Gordon Commission is taking, will convince ill-at-ease Canadians that history is working on their side—that there's no need to upset history's applecart.

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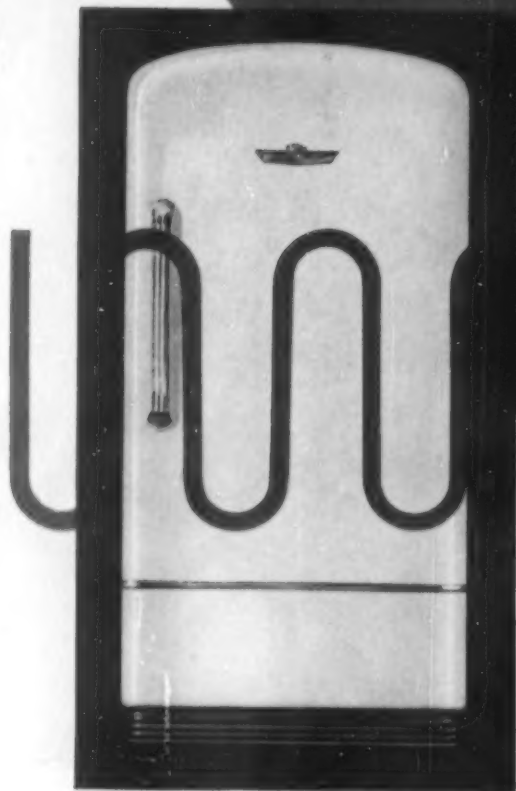


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NINE-MONTH PROFIT MARGINS: Over-All, They Look Good ...

(All figures for first three quarters)
(Millions of dollars)

	Sales			Net before taxes			Profit margin (before taxes)		
	1953	1954	1955	1953	1954	1955	1953	1954	1955
AUTOS									
Chrysler Corp.	\$2,576.8	\$1,402.9	\$2,466.3	\$175.3	\$5.7	\$162.2	6.8%	0.0%	6.6%
General Motors	7,931.1	7,219.2	9,543.8	1,054.4	1,198.5	1,976.3	13.3	16.6	20.6
ELECTRICAL EQUIPMENT									
Allis-Chalmers	391.1	376.6	396.5	34.7	41.5	39.1	8.8	11.0	9.8
General Electric	2,341.0	2,167.0	2,246.0	373.4	294.0	289.0	16.0	13.5	12.8
Sylvania Electric	224.5	201.0	216.0	24.6	13.6	18.5	11.0	6.7	8.5
Westinghouse Elec.	1,164.0	1,213.0	1,134.0	143.9	136.6	90.5	12.4	11.2	8.0
MACHINERY									
Amer. Mach. & Fdy.	106.1	94.1	98.9	8.0	5.6	6.2	7.5	5.9	6.3
Babcock & Wilcox	202.6	193.7	171.5	24.6	24.5	21.3	12.1	12.6	12.3
Baldwin-Lima-Hamilton	215.6	128.6	114.1	18.7	5.6	1.9	8.6	4.3	1.7
Blaw-Knox	87.5	82.4	72.1	13.3	8.4	3.4	15.1	10.2	4.7
Carborundum	63.1	53.7	67.3	10.6	4.3	7.6	16.8	8.0	11.3
Clark Eqpm.	93.6	69.8	92.5	10.7	8.5	13.3	11.4	12.2	14.4
Evans Prods.	21.3	15.3	30.6	1.3	D0.3	4.9	6.2	—	16.0
Sheller Mfg.	37.0	26.3	39.2	5.5	4.0	5.6	14.9	15.2	14.3
METALS									
Aluminum Co.	544.4	523.0	631.7	98.1	61.9	110.9	18.0	11.8	17.5
Armco Steel	445.1	396.5	508.8	72.7	83.7	119.9	16.3	20.0	23.5
Bethlehem Steel	1,570.0	1,253.5	1,523.8	144.0	167.4	252.3	9.2	13.3	16.5
Crucible Steel	184.3	118.4	171.8	19.5	3.8	21.4	10.5	3.2	12.4
Detroit Steel	77.6	37.0	74.3	11.3	D2.6	8.3	14.5	—	11.2
Reynolds Metals	217.6	221.2	283.8	32.0	27.6	51.9	14.7	12.5	18.2
U.S. Steel	2,920.0	2,440.5	3,003.9	467.7	277.2	535.5	16.0	11.3	17.8
MISCELLANEOUS									
American Tobacco	816.0	801.8	822.6	72.5	68.0	81.4	8.8	8.4	9.8
Armstrong Cork	168.1	163.6	186.6	21.9	19.1	23.9	13.0	11.6	12.7
Container Corp.	141.6	139.1	158.6	21.5	23.0	23.9	15.2	16.5	15.1
Radio Corp. of Amer.	609.4	660.3	740.6	53.7	56.4	62.6	8.8	8.5	8.4
Weyerhaeuser Timber	210.9	191.8	244.3	48.5	38.5	64.8	23.0	20.0	26.5

D—Deficit

Can They Hold at This Level?

This is a year of records for U.S. industry. Corporate sales are clipping along at a record pace, and net earnings are pointing toward new peaks (BW—Oct. 29 '55, p. 25). Corporate treasurers are purring contentedly over the bread-and-butter figures—the net earnings out of which stockholders are paid and dollars are salted away for reinvestment. They can also get a warm glow out of another set of figures—pre-tax profit margins.

• **Big Gains**—As the table above shows, for most companies the first three quarters of this year have been slightly terrific. Sales are way above last year, and also above 1953, which wasn't at all a bad year. And a solid part of this

extra sales revenue is carrying through to net earnings before taxes.

Last year at this time, margins before taxes were collapsing fast, as sales dropped off and the inflexibility of material and labor costs became a nightmare.

Now the pattern has reversed, and last year's experience may have helped reverse it. A year ago, corporations had to sweat costs down to maintain profit margins. Now sales have picked up, and the high volume of business is being handled on what is probably the best cost-per-unit basis ever seen in peacetime.

• **A Close Second**—This is reflected in the pre-tax margin figures for the first

three quarters, as well as in the nine-month earnings after taxes (BW—Oct. 29 '55, p. 25).

Preliminary estimates put pre-tax profit margins for all industry at around 7.1%—making it the second best year on record. Only the fast-inflating Korean War year of 1951 was better, and not much at that—7.4% for all industry. Last year, pre-tax margins were only 6.0%; in 1953, only 6.4%. This year, pre-tax net will probably hit a record \$43.5-billion.

• **The Big Winners**—Manufacturers' margins are ahead of most other categories in this peacetime boom year. The First National City Bank of New York makes a quarterly compilation of

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Common and Preferred Stock Dividends

The Board of Directors of Safeway Stores, Incorporated, on Nov. 8, 1955, declared the following quarterly dividends:

60¢ per share on the \$5.00 par value Common Stock.

\$1.00 per share on the 4% Preferred Stock.

\$1.07½ per share on the 4.30% Convertible Preferred Stock.

The Common Stock dividend is payable Dec. 15, 1955 to stockholders of record at the close of business Dec. 1, 1955. Dividends on the 4% Preferred Stock and 4.30% Convertible Preferred Stock are payable Jan. 1, 1956 to stockholders of record at the close of business Dec. 1, 1955.

DRUMMOND WILDE, Sec.
November 8, 1955



DIVIDEND NOTICE

The Board of Directors of the Kearney & Trecker Corporation has declared a quarterly dividend of fifteen (15¢) cents per share payable December 15, 1955 to the stockholders of record December 1, 1955.

Signed:
R. L. BISCHOFF
Secretary and Treasurer



Kearney & Trecker Corporation
Milwaukee 14, Wisconsin

LOEW'S INCORPORATED

November 16, 1955

The Board of Directors has declared a quarterly dividend of 25¢ per share on the outstanding Common Stock of the Company, payable on December 23, 1955, to stockholders of record at the close of business on December 6, 1955. Checks will be mailed.

CHARLES E. MOSKOWITZ
Vice Pres. & Treasurer

"... danger is costs will rise now, while sales are booming; when sales drop, it will be tough to trim costs back ..."

PROFIT MARGINS starts on page 121

sales and earnings for more than 500 manufacturing corporations. This shows a nine-month pre-tax profit margin of 15.9% for these companies, compared with 13.7% at the same point last year.

By industry, the big gainers have been automobile and auto parts manufacturers; metals, such as steel, aluminum, and copper; and chemicals. The textile companies, which slumped off badly last year, have shown a sharp recovery.

It's hard, really, to compare margins among industries, because each industry has its own criteria for efficiency and cost-consciousness. Steel's margins, for example, fluctuate much more widely than those of either petroleum refiners or chemical manufacturers.

• **Electrical Goods**—Even within a given industry you may run into some peculiarities. Take the electrical equipment industry as an example. While manufacturers' pre-tax profit margins generally have been going up, the biggest producers in this group report margins shading off even from last year, and generally well below 1953.

General Electric, for instance, shows sales up about 3% over 1954, but pre-tax profits are off slightly. GE's profit margin is down from 13.5% in 1954 to 12.8% for this year's nine months. Westinghouse and Allis-Chalmers show the same pattern. Yet Sylvania Electric has actually improved its margin over 1954.

The difference isn't so much in relative efficiency of the companies as it is in the fact that Sylvania wasn't involved in this year's price-cutting competition in heavy electrical goods.

• **Autos and Steels**—Some of the individual performances in other industries have been striking. Chrysler shows a nine-month pre-tax margin of 6.6%, compared with practically nothing at this time last year. However, this year's figure still is lower, by a fraction, than 1953. General Motors, on its way to net after-tax earnings of more than \$1-billion, had a profit margin of 20.6% for the nine months; its sales were 32% above last year, and pre-tax net is up nearly twice that percentage.

Some of the biggest gains in margins were racked up by the steels, which have been basking in the reflected glory of the consumers' fascination with new automobiles. The biggest units in the industry have done fine—Bethlehem's margin is up from 13.3% last year to 16.5% for the first nine months; U.S. Steel, up to 17.8% from last year's 11.3%. But the boost from fast-rising

sales shows up most markedly in the smaller producers' margins.

Detroit Steel, which had a pre-tax deficit last year, shows a pre-tax margin of 11.2% for the nine months. Crucible Steel had a profit margin of 10.5% for the nine months in 1953, slumped to 3.2% last year, and is back up to 12.4% this year. Armco Steel, with the emphasis on high-profit items in its carefully balanced product mix, boosted its margin from 20% in 1954 to 23.5% this year.

• **Where Next?**—Dazzled as they are by the hot glow of sales and profits, corporate treasurers may soon have to face a hard fact—pre-tax margins may be right now as fat as they will ever get in this boom.

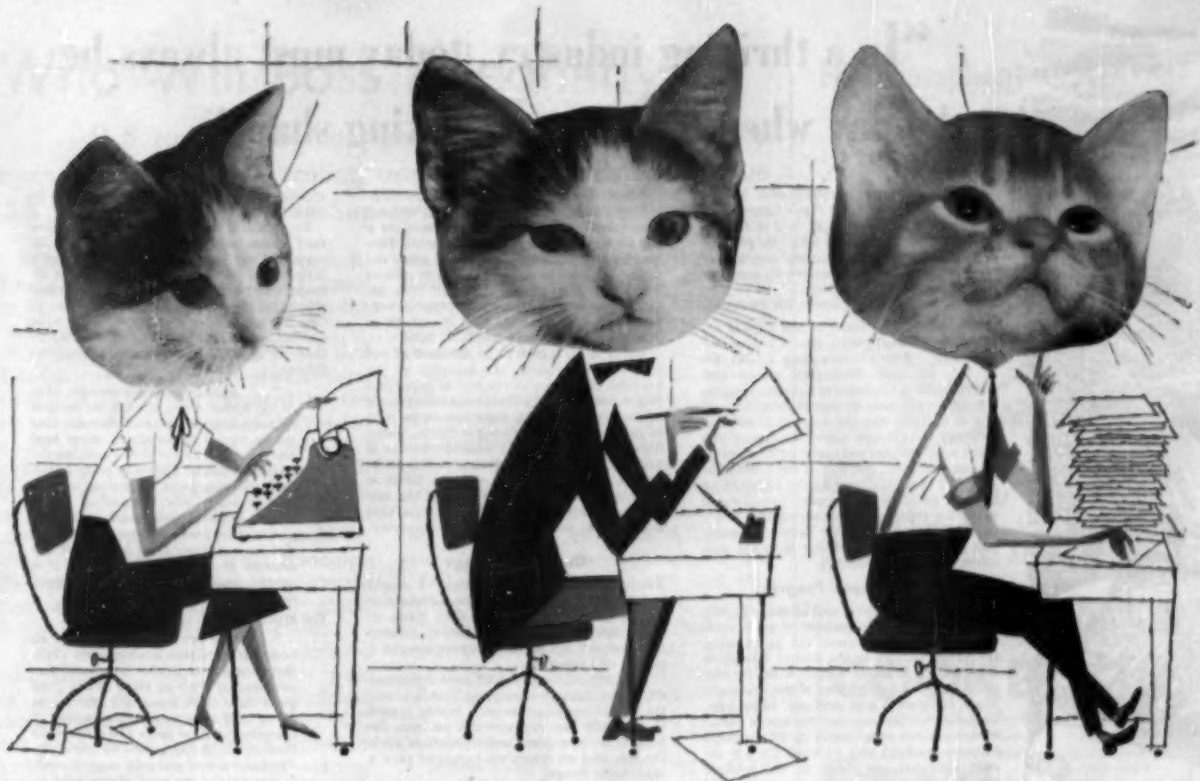
Up to now, manufacturers' margins have been increasing in each quarter. But in the third quarter the rate of gain slowed to nothing. A lot of things—vacations, a strike at one key company, or other factors not directly related to normal operations—could explain a setback as small as that, of course. The chief significance is not in the size of the dip but in the fact that there was no gain for that quarter.

• **Price Rise**—The reaction may well be a price rise. Certainly after running for many months at roughly the same industrial and consumer price levels, price increases would seem in order.

The Bureau of Labor Statistics' index of nonfarm commodities has just showed its first real jump in some time—a sharp 3% rise from June to September. And labor costs have been rising all the time. It is estimated that although there are about 600,000 fewer factory workers today than in 1953, the weekly payroll for production workers is \$55-million higher than it was then.

Price increases to compensate for still-rising costs are being talked up in many industries, particularly in steel (BW—Nov. 5'55, p25). Republic Steel's president, Charles M. White, warned last week that if "certain raw material costs" continue to rise, steel prices generally will have to rise. With demand for steel keeping the mills working around the clock, and a record expansion program confronting the industry, pressure on steel prices is mounting.

The big danger is that costs will rise now while sales are booming; then when sales drop off, it will be tough to trim the costs back. This was the problem last year, and many companies found that a simultaneous drop in sales and pre-tax margins wreaked havoc with net earnings. **END**



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"In a thriving industry, today must always be the day when tomorrow is taking shape"

Sir Eric Bowater presided over Special Meetings of The Bowater Paper Corporation Limited and its Subsidiaries held in London on November 15, 1955, at which the plan for the reorganization of the capital structure of the Bowater Group was unanimously approved by all classes of shareholders.

In the course of his address, Sir Eric said:

Assuming ratification of the capital reorganization plan today, your Corporation will in future have outstanding £7,245,000 in 5½ per cent Preference shares and £19,200,000 in Ordinary or Common shares, a truly simple form of capital structure and one in keeping with the magnitude of your business, which now ranks as one of the great international industrial enterprises of our country and, perhaps of the Commonwealth. I say this advisedly, for today more than 50 per cent of our very considerable assets are represented by our various overseas interests, largely in North America, and the greater part of our earnings also stems from those interests.

Current Year's Progress

The plans we had made and embarked upon for the further development of your businesses here and in the United Kingdom more slowly than we would wish, for the times required for delivery of the necessary plant, equipment and steel are, unhappily, longer in this country than elsewhere. However, work has commenced on all the main projects involved and we shall do our utmost to complete them at the earliest possible moment, for the products they are designed to manufacture are sorely needed towards enabling us to meet all the demands on us for those products in the United Kingdom, the United States and from our export markets.

The projects we have under way include the installation of six new paper machines in the United Kingdom, four of which are designed to produce newsprint or differing grades of magazine paper at the Thames and Mersey mills. At Thames, too, there are also to be installed two tissue machines for the manufacture of such products as "Andrex," one of the many products for which our St. Andrew Mills are famous, and the demands for which have far outstripped the capacity of our present equipment.

North American Developments

In Canada our pulp and paper mills have embarked upon another scheme of modernization involving the still further speeding up of their pulp and paper machines to achieve yet greater production and higher efficiency. In that country also the Bowater Power Company has decided upon the installation of further hydro-electric generating capacity by the harnessing of the Corner Brook River in the Province of Newfoundland, where the demand for power, both by our own paper mills and for other industries and public use generally, continues steadily to expand.

In the United States rapid progress is being made by Bowaters Southern Paper Corporation in the installation of that Company's third newsprint machine at their mills in Tennessee. I anticipate that shortly after the third machine comes into operation in the autumn of next year these mills will be capable of producing upwards of 300,000 tons of newsprint per annum, which will bring our total productive capacity in North America up to more than 600,000 tons a year—no mean contribution to the solution of the grave problem of an adequate supply of newsprint.

There is one other important development in North America upon which we have determined, that is the construction on a site adjacent to our mills in Calhoun, Tennessee, of a fibre building board plant designed to produce not less than 120 million feet per annum of this material. This development should prove a profitable venture, and it is expected that it will be in operation within two years from now.

We have no reason to be ashamed of our contribution towards the solution of the problem of an adequate supply of paper and paper products to fill the ever-growing needs of the Western world, especially in the field of newsprint. In a thriving industry, today must always be the day when tomorrow is taking shape and our approach to this problem cannot be termed in any way timid or lacking in the pioneer spirit. Moreover, our dollar earnings in North America are also not without importance to that economy.

Current Earnings

From figures available to date, I would judge that our earnings for the current year should compare favorably with those of past years, but I would, of course, remind you that our last earnings report covered a period of 15 months.

That our earnings should have continued on a satisfactorily expanding level is something that one might expect, having regard to the truly vast capital sums we have expended on new plant and equipment since the war and on which we expect to earn a reasonable return.

The interim dividend recently paid on the present outstanding Ordinary capital of £9,600,000 has led to speculation in some quarters as to the rate of the final dividend that may be paid on the increased Ordinary capital now proposed. Of course no decision in regard to this matter has yet been reached nor, indeed, can be reached until after the consolidated accounts for the year are made up.

While it is not for me to anticipate the final dividend which your Board may recommend on the increased capital now proposed, I do feel free to express my own private opinion that the results for the current year would justify the payment of a final dividend on the increased Ordinary capital of £19,200,000, of not less than six per cent.

One other matter that will be of interest to you—and again perhaps of particular interest to our Ordinary or Common shareholders—we have decided that the time has now arrived when we should issue a half-yearly statement of profits and we propose to adopt this policy in future, commencing with our next financial year. The publication of this half-yearly statement will henceforth coincide with the declaration of our interim dividend.

Newsprint Costs

Not unnaturally perhaps, there has recently been widespread comment in the Press on the matter of the price for newsprint, particularly in North America, where a modest increase in the price for that commodity, the first since June, 1952, has been announced by a number of newsprint manufacturers, including ourselves. In common with other commodities, the cost of newsprint production in North America has continued steadily to increase during that period of three and a half years. During this period these added costs have been absorbed by those mills, but they could no longer continue to do so and the time had

arrived when some part of them had to be passed on to the consumer.

From much of the comment that I have read I have gained the impression that this matter of the price of newsprint has got a little out of perspective and it was with interest therefore that I read an editorial article on the subject in a recent issue of "Barron's," a highly respected American journal, and I feel that I cannot do better than to quote to you some extracts as follows:

"... nobody, naturally enough, likes to pay higher prices, nor will the burdens of publishing be lightened thereby. And yet in regard to newsprint, some hard facts—as well as one or two principles—appear in serious danger of going by default. For newsprint is, after all, a commodity much like any other, freely bought and sold in the marketplace. To producer or consumer, the latter's verdict may at times seem harsh. But any attempt to temper with it, even in a worthy cause, is a game that simply isn't worth the candle."

The article goes on to say:

"... The price of newsprint, to be sure, has more than doubled since 1945. But virtually every other commodity has advanced at least as much and a good many have risen more. It's also worth noting that in some places newsprint is changing hands at up to \$80 a ton more than the \$125-130 quoted by the mills. The existence of this gray market tends to suggest that the price of newsprint is, if anything, too low..."

In any case, it is evident that over the years prices have not been high enough to invite the necessary expansion of capacity..."

The author continues:

"Business men should be the last to attack the profit system. Above all, this is true of those who are genuinely concerned with the maintenance of a free press. For freedom, as somebody once observed, is indivisible. Without the freedom to buy and sell, other liberties very soon would be in jeopardy. Supply and demand today may dictate a higher quotation for newsprint and that for some will be an expensive and possibly painful affair. But the alternatives are doing without as much of the commodity as is needed, or putting it in the hands of the government. Either way, the ultimate cost to the publishing business, not to mention the nation as a whole, would be far greater. The open market, in sum, whatever its ups and downs, is scarcely a threat to the spread of the printed word. On the contrary the market is a bulwark of its accuracy and truth."

I find myself in complete accord with the views expressed in this article.

In the United Kingdom, too, costs of production and distribution have continued steadily to rise. For some months now the prices of our raw materials have been at a substantially higher level than for a long time past, and the indications are that we may be called upon to pay still higher prices for these materials in the coming year. Up to now in this country too the newsprint industry has absorbed these additional costs but it also cannot continue to do so indefinitely, and that our industry here will soon have to seek some appropriate upward adjustment in the price of its product towards meeting these increased costs is, in my opinion, inevitable.

Bowaters

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Who Will Boss Alleghany?

U.S. judges rule Young-controlled holding company is an investment trust falling under SEC; it voids stock issue O.K.'d by ICC. Appeal to Supreme Court expected.

Minority stockholders in Robert R. Young's Alleghany Corp. won a major court victory in their battle with the management last week.

A three-judge federal court held that Alleghany is in fact an investment company and should be regulated by the Securities & Exchange Commission under the Investment Company Act instead of coming under the rule of the Interstate Commerce Commission in the role of a holding company that controls a carrier (BW—Nov. 26 '55, p. 34). This is precisely what Randolph Phillips—a former Alleghany financial consultant—and another minority stockholder have been arguing in court.

Last week's court ruling declared null and void the \$50-million issue of a new 6% convertible preferred stock that had been authorized by ICC last June under Alleghany's recapitalization plan. The court's point was that Alleghany "was not within ICC regulation . . . when it proposed to issue" the stock, hence the "issuance . . . would violate the Investment Company Act."

Alleghany had started offering the shares in question early this year in exchange (on a 10-for-1 basis) for 1,367,440 shares of an already long outstanding issue of \$100-par 5½% cumulative preferred. No dividends have been paid on the old preferred since early 1931. Thus, by last Feb. 1 arrears had built up to the formidable sum of \$130.625 per share.

The reason the company desires to cancel this old issue is obvious: Until this roadblock of senior dividend accruals is removed one way or another, any payments on Alleghany's common shares are out of the question. This hits the company's biggest block of shareholders, in particular Young and A. P. Kirby, long a principal partner of Young in his ventures.

Some months back, for example, Kirby was reported to be the beneficial holder of 516,500 (11.1%) of Alleghany's outstanding common shares. Young likewise was then the beneficial holder of (1) 30,000 shares plus (2) an option to purchase from the company another 100,000 at \$3.0625 each vs. their current price of \$8 in Big Board trading.

• **Control of C&O**—Alleghany, which was the top holding company of the old Van Sweringen rail empire, has operated under ICC supervision since October, 1945. At that time, the com-

pany had working control of the Chesapeake & Ohio Ry., through ownership of a sizable block of stock. Alleghany continued to dominate the C&O until January, 1954.

Meanwhile, Alleghany had sharply reduced its once large holdings of other rail securities, and expanded the non-rail portion of its portfolio. Then, early in 1954, the holding company completely divested itself of C&O stock. Young by then had his eye on the New York Central as Alleghany's next "controlled carrier"; sale of the C&O stock was a necessary first step to the maneuvers that led to Young's eventual capture of the Central. This coup was eventually carried out by direct buying of Central stock by Alleghany, bolstered by personal buying by Young and his associates (BW—Mar. 6 '54, p. 27).

• **Status**—These maneuverings seem to have opened some chinks in Young's armor, though actually Alleghany's direct holdings of Central stock have increased markedly since the capture. For one thing, SEC claimed last fall that Alleghany was an investment trust, and so came under its stricter rules. ICC, which earlier had showed signs it might agree, promptly reasserted its jurisdiction, and finally Phillips and the other mutinous Alleghany stockholder decided to seek a court decision.

That ruling was made last week, but the three judges suspended execution of the judgment for 30 days, to permit Alleghany to appeal.

N.Y. Bank Mergers Hit Official Snags

The tide of projected bank mergers in New York State has run up against some very stout sea walls.

• **Comptroller of the Currency** Ray M. Gidney—who has regulatory powers over national banks—revealed last week that he had acted to check the flood of mergers in fast-growing Long Island. The Franklin National Bank of Franklin Square, the Meadowbrook National of Freeport, and the Security National of Huntington were all told that Gidney "would not be willing to approve the additional acquisition of smaller banks" by any of them, "now and for some time to come." All three had been sprouting rapidly, mostly by merging with much smaller banks,

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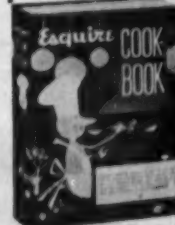


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Foreword by Arnold Gingrich

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and Gidney said the "mergers have gone far enough."

• George A. Mooney, New York's banking superintendent, had earlier blocked an attempted westward move across the Hudson by the County Trust Co. of White Plains. County Trust, the largest bank in Westchester, had wanted to invade Rockland County by purchasing the much smaller Ramapo Trust Co. in Spring Valley.

• At almost the same time, the Marine Midland Trust Co. of Central New York—a unit of the big bank holding company, Marine Midland Corp.—announced that it was withdrawing a bid for the Auburn Trust Co. (BW—Nov.12'55,p52). The state banking authorities have made no "official" statement about this blocked merger, but are reported to have forbidden it because assets of the resulting bank would have been eight times as great as any other bank in Auburn.

• In Accord—As for the federal crack-down in Long Island, Mooney seems to be completely in accord. The state official has admitted worry over the concentration of an area's banking assets in fewer and fewer hands. And he said that Washington's moves last week "lead me to believe that they are applying similar standards in dealing with merger applications to those we use in the banking department."

New Cleveland Bank Grows Out of Feud

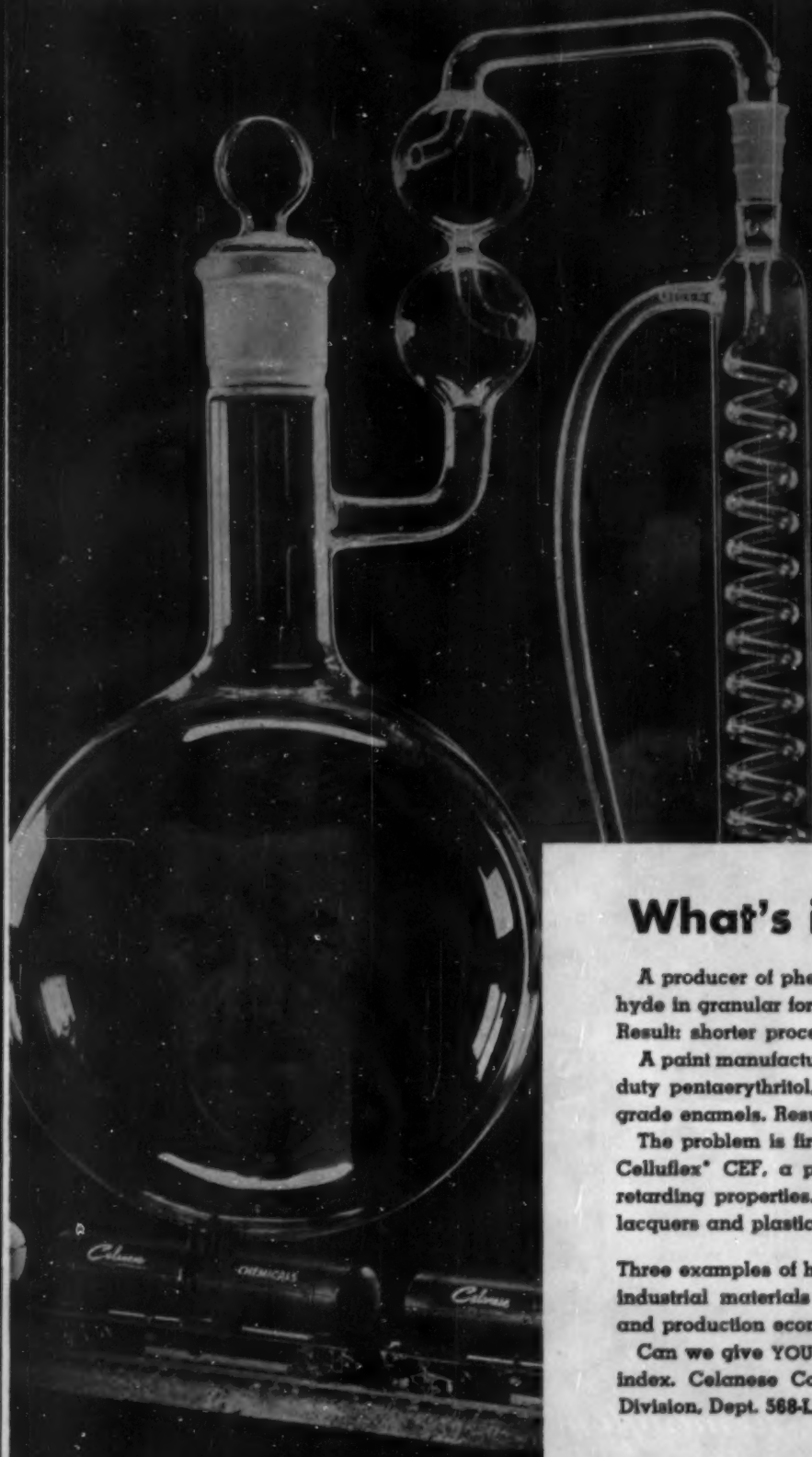
The Cleveland area is about to get its first new bank since 1938. And the fiscal infant is strictly a war baby—born of the long war between Cleveland's commercial banks and its largest mutual savings institution (BW—Apr. 2'55,p64).

Last week the 106-year-old Society for Savings announced that it is organizing the Society National Bank of Cleveland, to take over its own non-savings accounts. Under a law fostered by the Ohio Bankers Assn., the Society is forced to divest itself by next July 1 of all demand deposits, checking accounts, and commercial accounts.

The new Society National is scheduled to start business early next year, with an initial capitalization of \$5-million. It will be wholly owned by the parent Society, except for the directors' qualifying shares.

The Society will set its child up with \$10-million in cash, \$20-million in U.S. Governments, \$16-million in loans, and all of the parental nonsavings accounts. At the start, the infant will set up shop in the Society's own main office and nine branches.

• The Start—Mervin B. France, the



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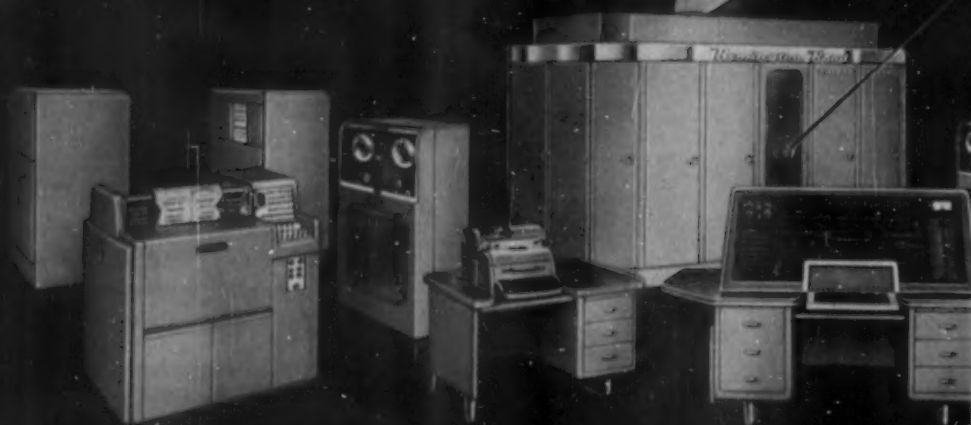
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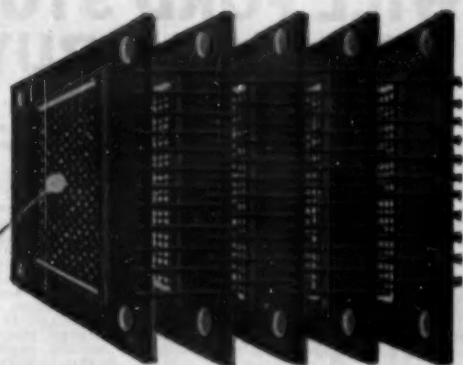
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Mellon-trained president of the Society, says the train of events that led to the forming of the new bank began in 1934, when several of Cleveland's commercial banks failed. The numerous orphaned depositors had to find new banking connections. The Society, which then offered only normal savings bank services, was unable to compete for this new business. By 1939 it had dropped from its long-held second place among the city's banks to a poor fourth.

To regain the lost ground, the Society won permission from the state banking authorities to accept demand accounts, subject to certain limitations. By last spring the Society had about \$34-million in demand deposits, roughly 10% of all its deposits.

Cleveland's commercial banks took a gloomy view of their rival's progress, and their cup of rage ran over in 1953, when the Society raised its interest rate on savings accounts to 2% from 14%. This move doubled the 4% "historic" difference between the savings rate paid by the Society and the 1% then paid by the commercial banks on their savings accounts.

The commercial banks hit back hard; all but one of them jumped their savings rate to 2%.

• **Expansion**—What really set the commercial banks afire was the Society's expansion moves—first they bought a suburban building and loan company, and last year purchased the Bank of Ohio, with \$40-million in deposits and seven branches. The commercial banks retaliated by pressing for the legislation that finally forced the Society to give up demand deposits. But, at the same time, mutual savings banks were given the right to organize and hold stock in commercial banks—hence Society National.

FINANCE BRIEFS

The Investment Bankers Assn., as might be expected, this week voted overwhelmingly against a U.S. Senate proposal to permit commercial banks to underwrite municipal revenue bonds. Since the early 1930s, commercial banks have been permitted to underwrite only issues secured by taxes.

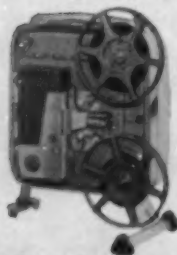
New corporate securities offered for cash in the third quarter totaled \$2.4-billion, bringing the nine-months figure to \$7.4-billion compared to \$6.9-billion at the same point in 1954, according to the SEC. Debt issues accounted for about 70% of the nine-month total, equity issues for 23%.

State tax collections for fiscal 1955 totaled \$11.6-billion, up about 4.5% over last year, and another record.



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BUSINESS ABROAD

British Giant

Sir Alexander Fleck (left), Scottish scientist and executive, bosses Imperial Chemical Industries—and argues that bigness and private management serve Britain well. From an expanding base at home—with such new facilities as the huge cracking plant below, ICI ranges the world.



Looks Warily Across Atlantic

CHANCELLOR OF THE EXCHEQUER Richard A. Butler, a man not given to extravagant statements, recently praised the Assn. of British Chemical Manufacturers for its astounding record of productivity increase—up 50% since 1948, compared to all manufacturing's 20% gain. "You are a glory of Britain," declared Butler. "Your diversity, your elasticity, your inventiveness are vital to us."

If chemicals are Britain's postwar

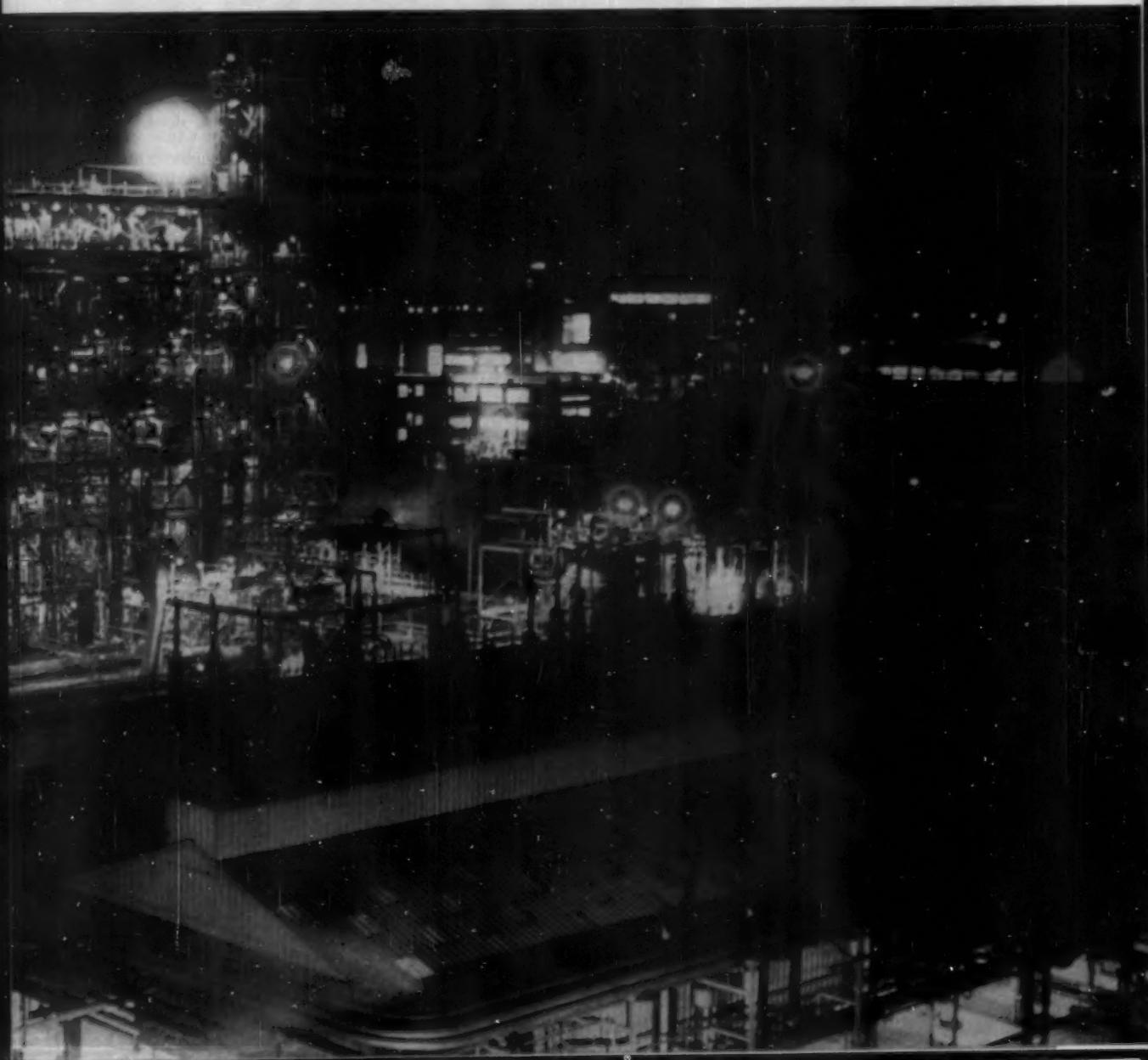
glory, Imperial Chemical Industries Ltd. is by far the brightest jewel in the diadem. Its magnitude—half the industry's total in terms of output—is dazzling. Its activities are watched keenly by every chemical man in the world.

Especially now: A rejuvenated, aggressive ICI is expanding everywhere—at home in England by the River Tees, where the Wilton area (pictures) may be on the way to becoming the world's

largest chemical installation—and abroad. And right now Americans are especially interested in the intense manner in which ICI is studying the U.S.

• **Big One**—This, in brief, is ICI's present scope:

• ICI (1954 sales: \$985-million, just ahead of Union Carbide & Carbon) is the world's second largest chemical producer after du Pont (sales: \$1.7-billion). In terms of assets, some



believe ICI might be a shade larger if both companies were weighed on the same scale.

- ICI is among the two or three largest industrial undertakings in the British Commonwealth. It is at once monopolistic and vital. It has been a prime target for nationalization drives by Britain's Labor Party. Yet to investors, in Wall St. as well as London's City, ICI is the bluest of British blue chips.

- ICI now has a management team that many believe leads Britain in research, automation, diversification, industrial relations, and management training.

Chemical men everywhere count on ICI to produce a stream of new metals, new plastics, new petrochemicals, new synthetic textiles, new nuclear techniques. Nothing less is expected of the discoverer of polyethylene—one of the great innovations of the plastics age—



TERYLENE fiber—in U.S. it's called Dacron—is British invention, developed by ICI.

and the developer of Terylene (called Dacron in the U.S.).

I. Cautious Reconnoitering

There has been a parade of rumors about ICI activity to scout the U.S. market. The company has not been a competitive factor here, largely for the reason that until the Justice Dept. intervened, ICI was linked with du Pont in the closest possible relationship, sharing patents and processes and overseas subsidiaries, and agreeing to leave each other's markets alone.

The separation in 1952 forced ICI to take on a new look. The company will not talk about its plans. Indeed, from its keen, intense Scottish chairman, Sir Alexander Fleck (cover), on down, ICI shuns publicity—especially regarding the U.S.

- **Travelers**—Nevertheless, the U.S. has been full of traveling ICI executives. They seem to be doing these things:

- Visiting friends in the industry (except du Pont), checking with licensees, studying technical and management methods.

- Overseeing ICI's \$10-million or so annual exports to the U.S. (total British chemical sales—including paints, drugs, and so on—were \$20-million last year); looking after ICI's one manufacturing venture here: Arnold Hoffman & Co., a small Rhode Island dyestuffs

TITANIUM sponge plant began producing at Wilton this year. ICI, with its special processes, hopes to make wonder metal in U.S. with American partners.

house that ICI bought in 1950. According to the trade, the acquisition hasn't been a great success—so far.

- Doing market research, and mulling over manufacturing possibilities.

- **On the Record**—One ICI project is squarely on the record. It is the partnership plan of ICI and Columbia-Southern Chemical Corp. to build a 5,000-ton-yearly titanium sponge plant in West Virginia. ICI has pioneered the sodium reduction process for titanium sponge, and the two partners have bid for a guaranteed price contract with Washington.

There's doubt in the industry, though, that the \$10-million plant will ever be built. Not long ago the government froze any further Washington-sponsored titanium expansion. Yet Washington officials point out that when the titanium freeze was clapped on, the Office of Defense Mobilization specified that negotiations continue with ICI-Columbia Southern.

- **Speculative**—There is speculation about other ICI plans. It's known, for example, that ICI executives have been market-researching the West Coast, and the Britons are said to be giving serious consideration to establishing a polyvinyl chloride plastics plant there.

All told, ICI makes and markets some 12,000 products. There must be many that ICI might conceivably want to make in the U.S. someday.

On the other hand, chemical industry opinion is that ICI is not planning a major expansion in the U.S. soon. Several of ICI's specialties are close to being in oversupply now. Moreover,



why should ICI come in and compete with its own licensees (for example, in polyethylene)? And why, ask industry people, should ICI want to enter a vigorous competitive battle with du Pont? "After you've been married for 20 years and forced to separate," remarks one observer, "you don't necessarily hate your old partner."

• **After-Effects**—The antitrust suit still colors ICI's thinking about the U.S. The suit was filed in 1944. By the time Federal Judge Sylvester Ryan upheld government charges in 1952, ICI and du Pont had canceled many of their agreements. They have divested themselves of joint interests in Canada and South America. In some areas, they are competing. Indeed, Washington seems to believe that ICI and du Pont have made, and are making, a good faith effort to abide by the judgment.

Yet any company that was as deeply involved as ICI in one of the biggest and toughest cartel cases ever won by the government, and which in its own bailiwick tends toward monopoly, is bound to generate suspicion in Washington. ICI is sensitively aware of that. And it is still under a strict court decree—"on parole" to the extent that it must inform the court of any minor dealings with du Pont. One such meeting is reported to have taken place in Judge Ryan's chambers two weeks ago.

In short, ICI people can't be blamed if they feel someone watching. So the company proceeds with extreme caution in the U.S.

II. Expanding Empire

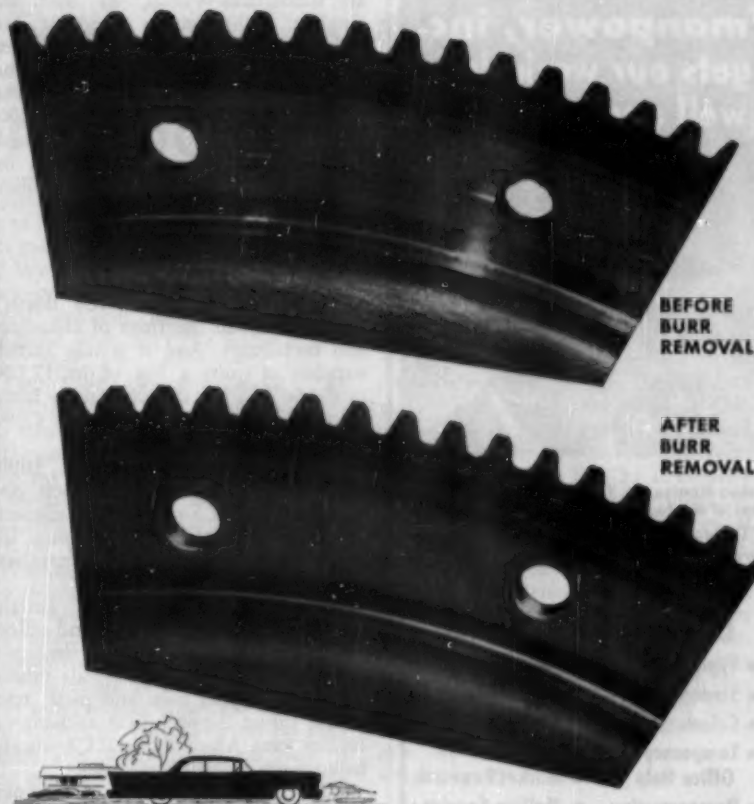
The reserve with which ICI approaches the U.S. is missing elsewhere. ICI exports from Britain are at record levels. ICI overseas subsidiaries (in a score of countries—in the Commonwealth, in Japan, Finland, South America, Middle East) spent \$45-million on expansion last year. In Canada especially, ICI is empire-building.

• **Canadian Growth**—Formerly, ICI and du Pont shared 83% ownership of Canadian Industries Ltd. After the antitrust suit, the company broke in two—du Pont of Canada, and ICI's Canadian Industries (1954) Ltd.

Now ICI-CIL boasts a \$14-million polyethylene plant at Edmonton (Alta.), and the big, brand-new \$22-million Terylene (Dacron) plant at Millhaven (Ont.). Open this fall, the Ontario plant is billed to produce 11-million lb. annually, far ahead of present Canadian needs. A \$9-million anhydrous ammonia plant is in the works nearby.

There are rumors that ICI is prospecting the Canadian West for a petrochemicals site, or eying the hydropower resources of British Columbia.

• **Home Base**—At home in Britain,



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much of the expansion focus has been at Billingham-Wilton, in northeast England. Billingham is already big—an industrial city covering 1,000 acres, employing 14,500, producing 2-million tons each year of some 60 products. Just across the River Tees is the 2,000-acre "expansion site" at Wilton, where ICI has spent some \$140-million on new plants, with another \$62-million authorized now.

There's precious little ICI doesn't do in the broad spectrum of chemistry and metallurgy. And it is sole British supplier of quite a few of its 12,000 products; it is the largest primary fabricator of nonferrous metals in the Commonwealth.

ICI employs 112,000 in Britain alone, maintains 121 plants and offices—all through 13 operating divisions. Among the biggest are Metals (aluminum and copper tube and plate, telephone cables, zippers, heat exchangers, carburetors); Alkali; General Chemicals; Billingham; Dyestuffs; Plastics.

ICI is deep in the science of automation, with its control engineers delving into every possible application of electronics, pneumatics, hydraulics. In all these fields, ICI missionaries are out trying to sell their philosophies to the rest of British industry.

Like many of Europe's corporate giants, ICI is the result of a long series of mergers. They were forced on Britain's weak, struggling chemical industry after World War I by competition—especially from the Germans.

The years that followed were those of "gentlemanly agreements" in the chemical world—and ICI was the staunchest believer in the rules of the cartel. After World War II, there were many who felt that the cartel-ridden British chemical octopus was perhaps "slightly" decadent, and content to stay put. Moreover, ICI's bigness made it a natural for a nationalization move by the triumphant Socialists in 1945.

One key to the transformation may be the almost complete change of top management since the war. Many of the former bosses—most of them Scottish—have died or retired. The new management is also largely Scottish—but it is generally a lot younger.

• **Balance**—Most outsiders believe, though their beliefs are hard to prove out—that sprawling ICI has achieved the right balance between centralization and decentralization. The autonomy enjoyed by the division is virtually that of separate subsidiaries—in some respects even greater. Each division has its own board, its own chairman; it plans, with only final approval from the main board, its own expansion.

Fleck, who started as a "lab boy" himself, is determined that ICI, for all its bigness, shall not develop hardening of the managerial arteries; ICI has elaborate methods of discovering merit right at the bottom; "every apprentice shall have a chairman's gavel in his tool kit," says Fleck. **END**

Unity Issue Puts Adenauer on Spot



Chancellor Konrad Adenauer (picture) was back in political harness this week after an illness that coincided with the failure of the Geneva meeting of foreign ministers. He has come back to face a foreign policy revolt within his own coalition—a demand from the Free Democrats that, notwithstanding the high price Molotov put on unification, Bonn should open direct negotiations with Moscow on this question.

Political observers have no doubt that Adenauer will squelch this revolt. When he puts the pressure on, the Free Democrats are expected to toe the line—they don't want to lose the ministerial posts they now hold in the Adenauer government. Even so, that would still leave two questions open:

- Can the Adenauer government maintain its pro-Western policy intact until the 1957 elections?

- Assuming it can, will the pressure for a German-Soviet deal be so strong by then that the next West German government, whether headed by Adenauer or not, will change its policy?

I. Divided Camp

There is no denying that the Geneva failure has produced a strong undercurrent of dissatisfaction with Adenauer's policy of sticking with the West and rearming West Germany within NATO. The opposition Social Democrats have maintained right along that the NATO tie would impede unification. What's more, many West Germans are beginning to ask: Since the Russians won't reunify Germany on

Western terms, why don't we start talking to Moscow to see if some other deal is possible? Some Germans argue that the West has given them everything it has to offer while Russia still has plenty to give—not only the Eastern territories but trade deals with the satellites and Red China.

- **Two Views**—Some unofficial U.S. observers take a very gloomy view of this trend in Germany. They think it will grow stronger month by month, force any German government to come to terms with Moscow regardless of what that does to existing German ties with the West.

Washington, by contrast, refuses to take this new mood very seriously. The official view is: The Germans will stick indefinitely to the present policy of alignment with the West and of treating unification as an allied problem. They stand to gain more—and they have more chips to bargain with—in joint negotiations with the West than if they negotiate alone with the Russian colossus. The Germans know from their own prewar experience what happens to small powers in negotiations with big powers, and this has been confirmed by their recent dealings with Moscow.

This doesn't mean that there will be no diplomatic contacts between the Russians and the Germans. There certainly will be at an informal level. But the Germans will shy away from any formal bilateral conference on unification—unless there should be an economic collapse in West Germany or a shift to isolationism in the U.S.

II. Marking Time

Whatever the merits of these two contrasting views, it's a safe bet that the Adenauer government can keep its policy poised about where it is until the 1957 elections. To do this, however, Adenauer will have to work within a basically defensive strategy—one designed to keep West Germany in business as a separate state until Moscow ultimately is ready for a unification settlement that doesn't call for Soviet control of the whole country.

- **Setbacks**—Adenauer would be the last to deny that his foreign policy has suffered serious setbacks in the past year and a half. From the time he took office, he had his heart set on the creation of a federated Western Europe in which West Germany would be a partner to France but still supply the driv-

ing force in the federation. That way Germany would make a comeback as a world power. He hoped that the combination of this development and German ties to the U.S. and Britain through NATO would force the Russians to give up East Germany.

France killed the first part of his dream when it vetoed the European Defense Community in September, 1954. Since the summit meeting, both during Adenauer's visit to Moscow and again at the foreign ministers' conference, the Russians have proved that they will not relinquish East Germany so easily.

- **Concessions**—In pursuing his new defensive strategy, Adenauer may have to make concessions to the trend of German opinion. It has become a political necessity for him to convince the West German population that he is exhausting every reasonable opportunity to achieve unification. And that could mean diplomatic exchanges with Moscow beyond those now planned.

However, Adenauer feels sure that he can convince the Russians that they will get nowhere by direct negotiations with Bonn, that in the end they may be willing to talk business with the West as a whole. One reason he plans to push ahead with rearmament is to convince Moscow that its present policy won't pay off.

III. Economic Strength

Adenauer's great strength lies in the economic and social stability his government has built over the past seven years. This will stand him in good stead as he maneuvers to maintain West Germany's pro-Western policy.

Despite some worries over inflation earlier this year, there is no sign of a serious threat to West Germany's industrial expansion. Gross national product for 1955 will be at least 10% above 1954; the increase next year probably will be almost as great. Labor peace for 1956 seems to be assured by the compromise wage settlement that has just been reached with the Ruhr metal workers (BW—Nov. 19'55, p150). A capital market is suddenly blossoming—West German corporations are expecting to sell more stock in 1956 alone than during the past seven years.

In a situation like this, rearmament won't pose any serious economic problem. Even if Adenauer's army program were speeded up drastically, military expenditures and investment wouldn't be likely to take more than half the annual increment in the gross national product. As things look now, it won't involve large financial outlays until mid-1957—the next 18 months will be devoted to training the cadres of the new army. That means Finance Minister Schaeffer should be able to salt away sizable surpluses for the later stages,



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when expenditures will rise sharply. • **Guns and Butter**—The fact is that the West German economy has grown to the point where it can handle the rearmament load and still provide more for the workers and for social improvement in general—all without impinging on exports.

Earlier fears that the West Germans couldn't find a big enough market in the West for their exports and would have to make terms with the Russians to open Eastern outlets have proved groundless. While some Ruhr businessmen talked longingly of Soviet bloc opportunities, especially of their traditional markets in Eastern Europe, there is no real pressure on Adenauer to do anything about it. German industry wouldn't for a moment jeopardize the position it has won in the West by a political sellout to Moscow.

IV. TNT Issue

Adenauer's real problem is the political dynamite that lies buried in the unification issue. Unification isn't a burning national problem at the moment. In fact, foreigners who visit Germany are surprised that the average West German isn't more concerned about it. This may be partly due to the fact that Germans, perhaps more than most peoples, have a preference for letting George—meaning the government—worry about it. Certainly there is no strong feeling that Adenauer has missed any opportunities so far. Nor do most Germans expect Moscow to agree to unification any time soon.

But there is an instinctive fear that the division of Germany will become permanent, that in another generation or two the German people east of Elbe will be lost for good. This is the kind of fear that could be used to fire a powerful national movement if the Adenauer government, or any other, did not do everything possible to settle the issue. When the Germans latch onto an idea they are likely to carry it to extremes.

• **Red Strategy**—You can be sure the Russians will work on this fear and promote the idea that the West can't help the West Germans get what they want. Molotov did his best to get this idea across at Geneva. He may have had some success in making the West German public believe that it is the West that makes unification impossible by insisting on free elections and freedom for a united Germany to stay in NATO.

Once a Soviet ambassador sets up shop in Bonn, under the agreement Adenauer reached in Moscow, this line will be peddled to more and more West Germans. But the betting in Washington and London is that Adenauer will prove more than a match for the Soviet diplomats.

BUSINESS ABROAD BRIEFS

A \$30-million shipyard and a small lime plant are planned for the British West Indies island of Grand Bahama. New York tanker tycoon D. W. Ludwig (National Bulk Carriers, Universe Tankships, American Tankers Corp.) will undertake the projects, part of the Bahama government's plan to create an industrial and commercial free port on the island, 81 mi. east of Palm Beach.

West Germany, as expected, now leads in the U.S. imported car derby. Nine-month figures: 23,000 cars, worth \$26-million, from Germany; 17,000, worth \$23-million, from Britain. A year earlier, Britain had \$27-million sales against Germany's \$5.2-million.

Expanding overseas: Republic Steel Corp. has set up an International Projects Div. in New York to answer demands for technical help, market studies, and the like from foreign steel companies. . . . National Research Corp., Cambridge, Mass., is increasing its investment in Leybold-Hochvakuum-Anlagen, GmbH, West German producer of industrial high-vacuum process units. . . . National Research brings Leybold processes to the U.S. under license.

Middle East oil has quieted down, at least for the moment. After a nasty squabble, Syria has agreed to accept \$30-million annually as basic royalties for Iraq Petroleum Co.'s pipeline rights across the country. Negotiations now open with Tapline Inc., a pipeline that carries Aramco's oil to Mediterranean ports. . . . In Israel, petroleum from the nation's first well is beginning to flow at the rate of 350 bbl. to 400 bbl. a day.

European travelers are offered a new gimmick by Ford Abroad Tours, New York: For \$1,098 per person, two couples can pool together to get air transportation to Europe via Trans World Airlines, a choice of three different 33-day all-expense tours, and a British Ford Anglia, which can be shipped back to the U.S. after the trip.

Swiss watch propaganda, pro and con, is flying thick and fast. A study issued by the American Society for Friendship with Switzerland says 28 states in the U.S. each sell more than \$1-million annually to the Swiss. Maryland's Gov. Theodore McKeldin wants an immediate review of last year's 50% increase in watch tariffs, pointing out the Swiss are his state's best tobacco customers.



Versatile new adhesive makes stronger, more heat-resistant sandwich panels

With D-253N—a new Armstrong adhesive—you can now turn out honeycomb sandwich panels that are stronger and more heat resistant than those made with the best thermoplastic cements previously available.

D-253N is virtually a new type of adhesive, intermediate between thermoplastic and thermosetting cements. At room temperatures, it can hold a dead load twice that held by conventional thermoplastics—and hold a useful load at temperatures as high as 180° F.

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cations. Spray or roll it on core and skin sheets, force dry for one or two minutes, then assemble your sandwich. One run through a pinch roll—and the bond's made.

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Mass Production Comes Home



Machine toolmakers have long supplied the equipment behind industry's high speed output. But mostly they've been unable to use mass production in their own plants. Now a change is under way as machine tool builder Henry D. Sharpe, Jr. (left) fits Detroit's production ways to his company's work.

The machine tool industry has always had a build-in paradox. You have to look in two places to see it.

First, you look inside a plant that uses many machine tools. One of the new automobile engine plants is a good example. Here, you see mass-production machines slamming out engines at a fast clip—150 to 200 engines every hour.

Second, you look inside the plant where those machine tools were built. Here, you see the product trickling from a line arranged on the job-shop principle of one-at-a-time production and repeated rehandling. You'd think that the builders of machine tools had never heard of the new production concept that they helped to create.

The difference, of course, goes back to the difference between turning out consumer products in the hundreds of thousands and turning out production machines by the dozens or scores.

• **Brown & Sharpe**—At least one machine tool builder is trying to change this. Brown & Sharpe Mfg. Co., an old-line Yankee machine tool builder, is adapting Detroit-style features to its production of automatic screw machines at Providence, R. I.

To the industry that Brown & Sharpe represents, this is a minor revolution. Machine tool builders sometimes make single parts on a straight-line volume basis. But Brown & Sharpe is believed to be the first to tackle an entire machine with modified techniques of mass production.

• **Savings**—Brown & Sharpe is well into a three-year program of refitting its own plant. By late 1957 the company expects to complete the project.

With the new setup, it will take Brown & Sharpe only four months to build an automatic screw machine from foundry castings to final assembly, instead of the present seven to nine months. This, in itself, will cut production costs. The company figures that without the new facilities,

its latest \$6,950 screw machine would have to be priced 25% higher.

Even more important, cutting the lead time in half could be a great competitive advantage in an industry that's notorious for its violent fluctuations in the order rate.

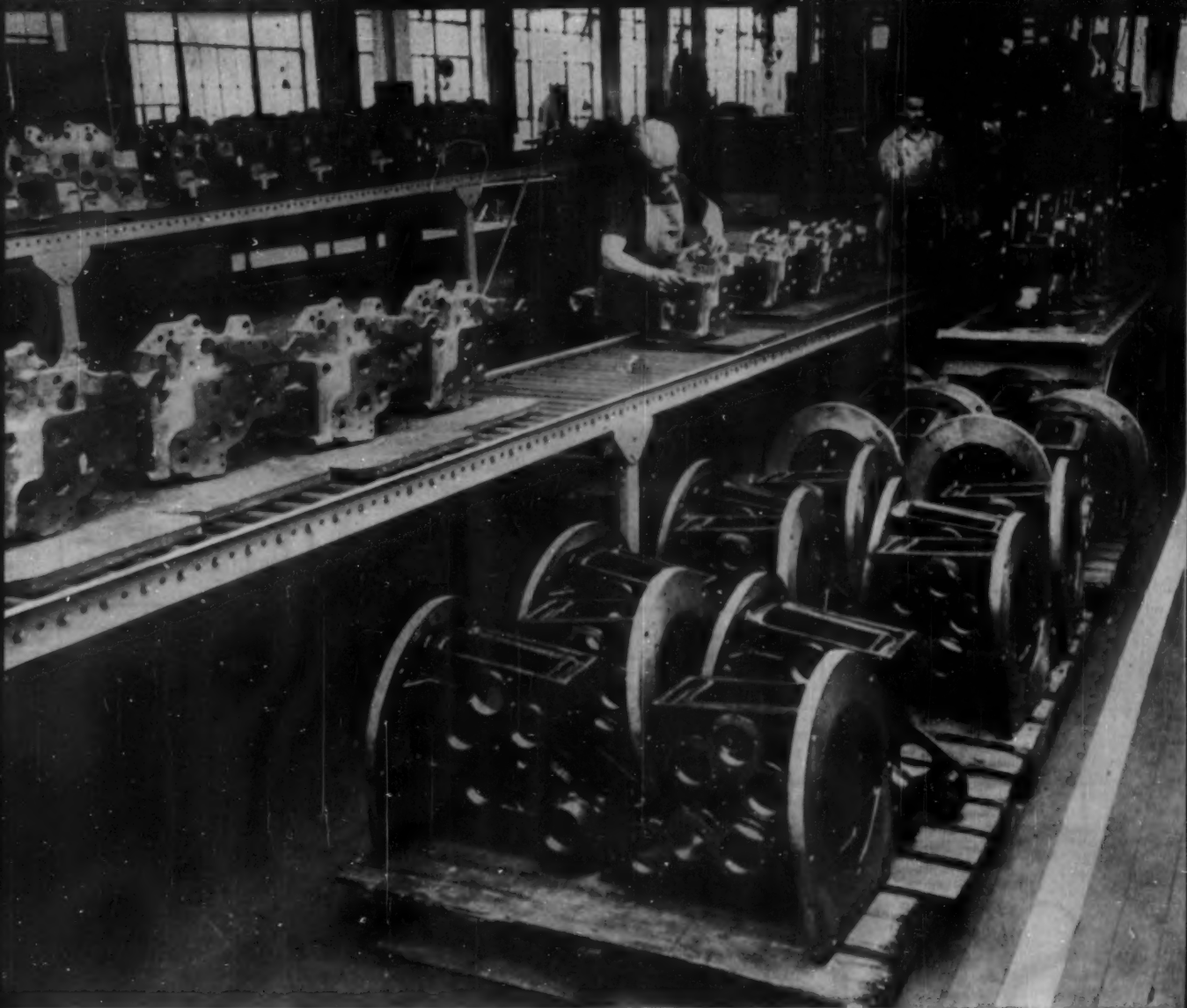
• **More Mass-Production**—At the moment, Brown & Sharpe is making only one model of its screw machines on a production line basis. It introduced this machine five months ago, and had designed it for the production line. Eventually, though, the company will put its whole line of screw machines into mass-production.

These screw machines are close kin to lathes, but they are more versatile pieces of equipment. A screw machine can perform about a dozen different cutting operations on a long bar of metal. From the metal, it can make such things as screws, watch pinions, and small motor parts. In fact, almost any metal part that's small in size, basically round in cross-section, and wanted in volume is fair game for an automatic screw machine.

Many such machines perform operations on half a dozen bars of metal at a time. Each bar rotates on a separate spindle. The machine will work on all six simultaneously.

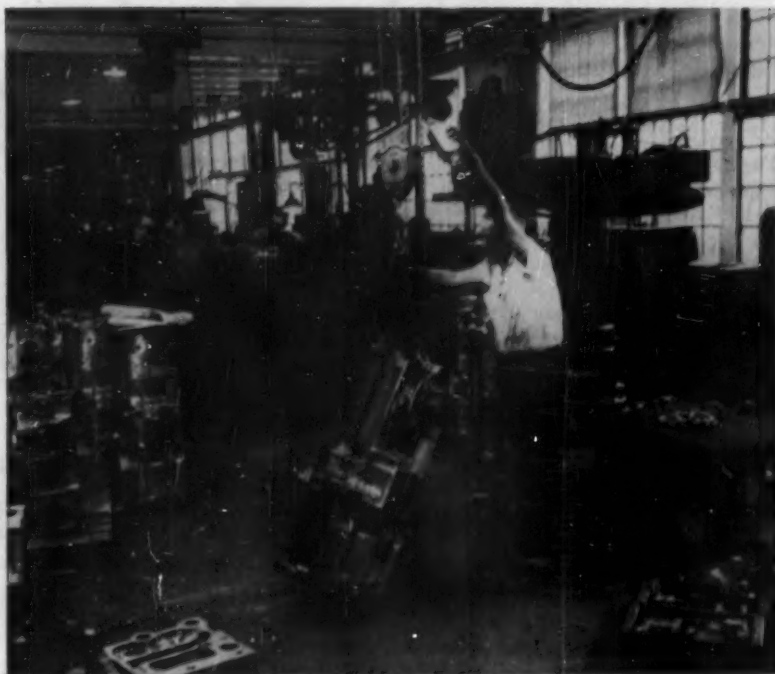
The design of Brown & Sharpe's production line screw machine is in step with the industry trend toward fancy controls, faster output, tougher cutting materials, and closer work tolerances (BW—Sept. 3'55, p41). Push buttons for starting and stopping replace old hand-levers. But while the machine tool industry as a whole stresses streamlined tools, Brown & Sharpe also stresses streamlined production.

• **The Layout**—In Building No. 10 at its Providence plant, the company is setting up separate, parallel, straight-flow lines for each of the screw machine's main parts—base, bed, speed case, and driving-shaft brackets. Along



NEW methods bring Brown & Sharpe's screw machine parts to assembly on conveyor lines. Total production time now: four months.

OLD way of making screw machines involved long delays in work pile-ups that added three to five months to production time.



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each conveyor line are newly designed special-purpose tools that make many cuts on a single part at one shot. For example, one 10-spindle Natco machine does finished boring on the screw-machine bed in about 15 minutes. A standard boring machine would take about eight hours for this job—and much of the time would be spent in resetting the bed and machine for each of the 10 bores. Altogether, Brown & Sharpe anticipates a total outlay of around \$600,000 for special-purpose machines. It considers these the key to its production program. The three Natco machines that it has already installed cost \$253,000.

• **Gamble on Orders**—The company's \$4-million plant refitting program, planned in 1953, is admittedly a calculated risk. "Maybe it will blow up in our face," one executive says. Mass-production techniques, no matter how limited, depend for their success on volume orders. The experiment would certainly not pay off on the grinding and milling machines that Brown & Sharpe produces in much lower volume than its screw machines.

The company hopes, and firmly believes, that orders for its bread-and-butter screw machine will continue strong. Brown & Sharpe built its name on this machine. Despite stiffening competition in recent years, it is still the biggest producer. Right now, Brown & Sharpe's Screw Machine Div. has a backlog of well over 450 machines on order—enough to keep it busy through July, 1956. The company thinks that if it could not fill order backlogs quickly, potential customers would turn to its competitors. "With this new setup," the company says, "we're way out in front of our competition."

The changeover is moving slowly, partly because the high cost must be spread over several years, partly because present production facilities, scattered throughout the company's old multi-story buildings, must be gradually rearranged or junked. One by one, 12 lines will be installed—five for making main parts, six for other parts (gears, spindles, turrets, ways), and one for final hand assembly.

The speed-case and bed lines are now in operation. Next month the line for base parts will begin humming. In early 1956 the remaining two lines for main brackets will be ready.

• **Easy Way**—Comparison shows plainly the efficiency of the new method.

Under the old method a gear had to be turned in the turret-lathe department, drilled in the broaching department, smoothed in the grinding department, and finally cut and hardened. During this process the gear traveled from building to building, up and down floors, and occasionally

would sit in a pile until a machine operator had finished previously scheduled jobs on other components. All told, a production lot of 100 gears would be on the move for 14 weeks.

In the new setup, every machine needed for cutting gears will be on one floor—in a straight, step-by-step line that will even include the induction-hardening operation. The gear, depending on its type, might be machined at almost every station, or it might skip one station and go on to the next. A rough-cast gear would emerge finished, with teeth cut, in an estimated four weeks. With this shortened lead time, Brown & Sharpe says it will greatly reduce its in-process inventory of gears.

• **Bigger Changes**—The new program is just one symptom of recent, large-scale changes in the company. In the 1920s and 1930s, Brown & Sharpe did not really feel the sting of competition. But after World War II, it faced fresh competition from foreign and domestic companies that caught hold during the war. Far worse, the company was coasting on its past reputation, putting its confidence in machines of somewhat outmoded design and in an organization top-heavy with conservatism. As one company officer puts it: "When someone thought of a new design, the first question was, 'What's the matter with the old machine?'"

Since April, 1951, when 32-year-old Henry D. Sharpe, Jr., took over from his father, the company has been reorganized on a divisional basis. Each division is now responsible for its own profit and loss.

In February of this year, on what the company calls "Bloody Thursday," Sharpe laid off or reassigned some 100 employees at the supervisory and executive level. "There were moves we men down the line couldn't understand," one man remembers. "Jobs were shifted all over. But the purpose was simply to get down to brass tacks. I suspect some of the older men who had left the company before then would have hated these moves—if they had been around."

To complete the revamping, Sharpe has pared the company work force from the Korean high of around 9,000 to the present 3,500.

Besides eliminating deadwood, Sharpe has tossed out unprofitable hardware. The company no longer makes sewing machines, or hair clippers, or low-volume plain-cylindrical grinding machines. Instead, it is putting its money in the places where money comes from—into automatic screw machines. This way, says Sharpe, the company should saw off the peaks and valleys of orders that have held machine tool makers to the old job-shop methods of production. **END**



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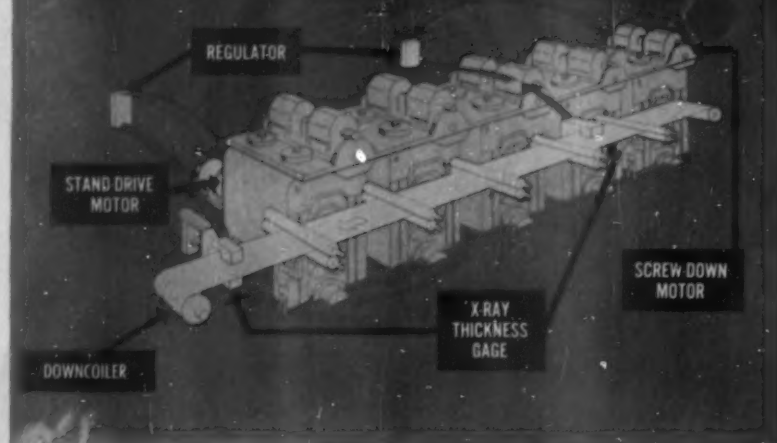
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5 Stand Tandem Cold Rolled Strip Mill



For Closer Rolling Tolerances

New GE gauge uses x-rays to keep track of sheet thickness during rolling and electronic devices to make corrections in the mill rolls and tension.

The thickness of cold-rolled steel sheet and strip can now be controlled automatically to closer tolerances during the rolling process, by means of an x-ray gauge produced by General Electric Co.

The automatic gauging device should satisfy the demands of tinplate buyers who want closer tolerances than the ones available. Standard specifications for tinplate permit a tolerance of plus-10% of stipulated thickness or gauge (for example, an extra 0.0006 in. on a 0.006-in. thickness). GE's gauge controlling process can control the thickness with an accuracy of 0.00015 in.

United States Steel Corp. developed the process jointly with General Electric and is using it at its Irvin Works, Dravosburg, Pa.

• **Corrects Size**—The automatic gauge control differs from similar gauges in that it can continually adjust the tension in the sheet.

In the diagram above, the steel sheet goes through five rolling stations, known as tandem stands, during its passage through the mill.

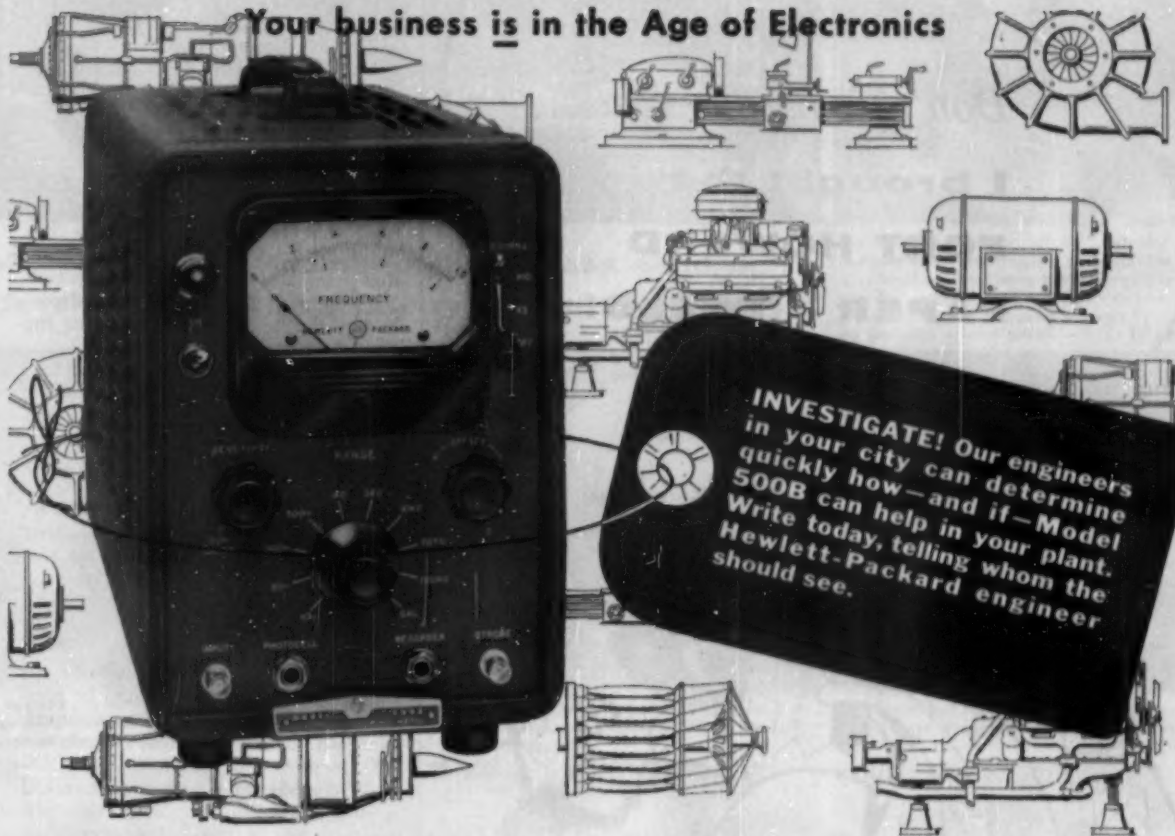
The GE device, which uses transistors, passes the sheet between an x-ray source and receiver at two points in the mill—between the first and second stands, and between the final stand and the downcoiler, the roller on which the sheet is finally wound.

The amount of absorption of x-rays as they pass through the moving sheet is calibrated to the desired thickness of the metal. Thus, variations in thickness show up instantly. Whenever the first x-ray gauge shows a deviation from a pre-set thickness, a host of electronic gadgets acting as regulators adjust the rolls automatically and almost instantly. The second x-ray gauge, operating behind the final stand, actuates the stand-drive motor mechanisms, which make corrections by adjusting the tension of the sheet between the final two stands.

• **Human Fallibility**—In the present system, corrections are made by operators at the individual stands of a tandem mill. They get their information from less sensitive measuring devices and must adjust the rolls mechanically. Thus, they have to keep their eyes riveted on their instruments as long as a coil is going through the mill. Over a long, high-production shift, this is difficult and more or less erratic. Human reactions, too, are thought to be slower and less precise than those of the electronic system governed by the x-ray gauges.

Thus far, U. S. Steel reports improved quality as a result of the GE gauging system. As yet, the system has not had a measurable effect on yield by cutting down rejects, but U. S. Steel hopes it can prove this, too. **END**

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Aureomycin Approved For Preserving Poultry

This week, a brand-new field opened up for antibiotics. The Food & Drug Administration said that Aureomycin, an antibiotic that was developed several years ago by Lederle Laboratories Div. of American Cyanamid Co. could be used to preserve dressed poultry.

Dressed poultry now has a shelf life of about 7 days. Aureomycin will extend that to at least 14 days. The antibiotic is added to the chilling bath, now used at the end of the eviscerating line in poultry-dressing plants. When the birds are dipped into the bath, bacterial growth is retarded.

• **Safeguards**—On any such use as this, approval on grounds of safety is made by FDA only after the Dept. of Agriculture has certified its need. Certification from the Dept. of Agriculture came several days ago.

FDA would never have given approval, of course, if it had believed that there was any danger to the public. Lederle first had to prove that the use of the antibiotic was not merely a substitute for good sanitation, but that it had a positive value of its own. Also, it had to prove that no antibiotic, or harmful residue from it, would be present in the food when it was consumed. Since all poultry is cooked, Lederle was able to prove this point.

• **Wider Market**—Antibiotics have had a phenomenal growth over the past dozen years. In 1943, the entire pharmaceutical industry produced only 29 lb. of antibiotics—all of it penicillin. This year, some 2-million lb. will be produced. With the field of food preservation opening up—there are a number of applications over the horizon—it looks as though the wonder drugs are in for another fast ride.

PRODUCTION BRIEFS

Russia's big power plant—the 2.1-million-kw. Kuibyshev hydroelectric plant, described by the Soviets as the world's largest—is scheduled to generate its first current before year-end. The plant, on the right bank of the Volga River, will have 20 turbines of 105,000 kw. each.

Toy electric trains are being used to transport small quantities of radioactive materials within the laboratory at the Hanford Atomic Energy Commission plant. The train, running by remote control, minimizes exposure of scientists to radiation. Various track arrangements enable the train to carry its dangerous cargo to different parts of the laboratory.



Architect: Vincent G. Kling, A. I. A., Philadelphia, Pa. • Consultant: I. M. Pei, New York, N. Y.
General Contractor: Turner Construction Co., New York, N. Y. • Panel Manufacturer: Ingram-Richardson Mfg. Co., Beaver Falls, Pa. • Roofer: Wm. C. Kulzer Co., Philadelphia, Pa.

Unique porcelain enamel-cellular glass sandwich developed for RCA's Cherry Hill curtain walls



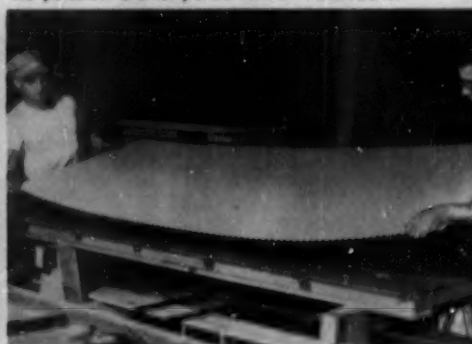
The architect, members of his staff and RCA's representative check progress at the job site during erection of the five Cherry Hill buildings. The owner and the architect report: "We overcame design problems plaguing grid-panel pioneers by insulating the porcelain enamel panels with 2" FOAMGLAS.



"We avoided any moisture problem by providing a $\frac{1}{4}$ " air space between the insulation and the outer porcelain enamel skin (detail above).



"Moisture can accumulate only in the air space and runs down moisture-proof FOAMGLAS to a weep strip. Caulking seals joints.



"High rigidity of FOAMGLAS and vertical corrugations of outer skin prevent 'oil-canning' or dimpling.



"Completed 94" x 39" PORCELPANELS weighing just 6½ lbs. per sq. ft. were easily lifted into place.



"Our unique panels combine ultra-modern appearance and high insulating efficiency (U factor 0.15)... cost just \$4.50 per sq. ft. erected in place.



"Lift slab method cut construction time and costs. Roofing materials were raised right on the top slab.



"We also insulated most roofs with FOAMGLAS. Its high strength permits heavy foot traffic, minimizing need for catwalks.



"FOAMGLAS gives our Cherry Hill buildings added protection, too, because it's fireproof."

Use coupon today for a copy of our brand new booklet on latest curtain wall designs which utilize...

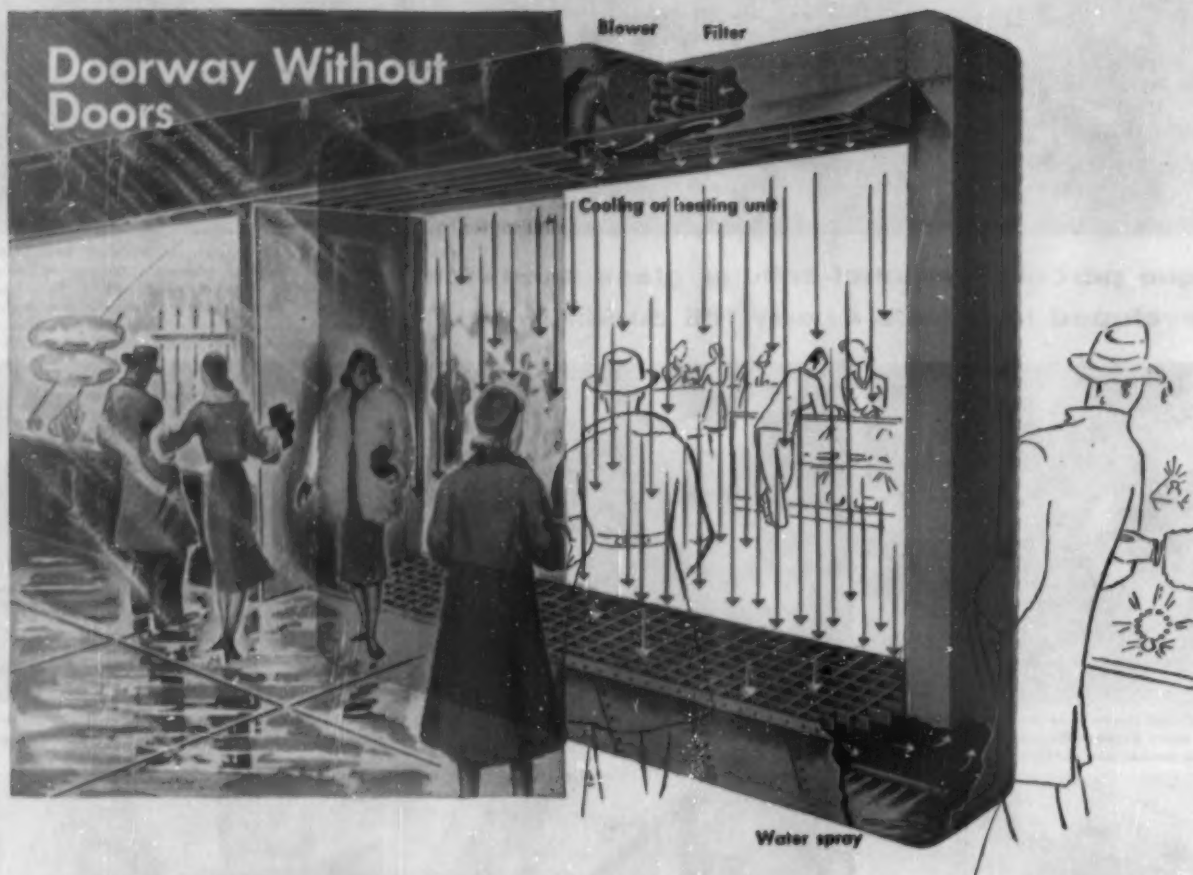
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the cellular, stay-dry insulation

Pittsburgh Corning Corporation

Dept. F-125, One Gateway Center
Pittsburgh 22, Pennsylvania
In Canada: 57 Bloor St. W., Toronto, Ontario

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☐ Send engineer to discuss a special insulating problem.

Name _____
Company _____ Title _____
Address _____
City _____ Zone _____ State _____



A Door That's Made of Air

The retail trade has struggled for years to make it easier for window shoppers to come inside a store. Years ago the revolving door was developed—and it was hoped this would present shoppers with less of a chore than opening a door that swung on hinges. Then came the beam of light—when you walked through it, the door opened automatically.

Now, the Swiss have introduced a doorway that doesn't need a door at all. There is nothing but space between the outside and the interior of the store. Two big U.S. supermarkets are about to try the doorless doorway.

• **Curtain of Air**—The Swiss development uses an air curtain (sketch) that eliminates doors for the main entrances to stores and supermarkets. The curtain of air acts as an insulating wall to protect the interior of the stores from outside weather conditions.

The open doorless fronts make it possible for store operators to place

their display counters closer to the entrance. And this should arouse greater curiosity in passersby, since the absence of doors, in effect, puts them inside the store.

• **How It Works**—The curtain is operated by blowing a stream of air downward from specially shaped directional nozzles, placed over the entrance of the store. The air is sucked in through a floor grating that runs along the length of the entrance. Filters remove insects, dirt, and dust. Waste paper and small particles are collected in a pit under the suction grating. There, they are periodically flushed away by water.

As shown in the diagram, the air is carried through a heating or cooling unit after being filtered and cleaned. It is then moved through ducts to the ceiling and recirculated.

A refrigerated compressor cools the circulating air in summertime and steam coils provide warm air for the curtain in the winter.

The nozzles are adjustable and the velocity of the ducts can be changed manually or automatically to meet changing wind conditions. The curtain is said to eliminate drafts. And it is claimed that the breeze created by the movements of air will not disturb a person's hat or hair.

• **Deterrent to Dogs**—In the cycling process, it is necessary to spill some air on the outside of the doorway to prevent the heating or cooling of air picked up from the outside. This reportedly keeps dirt from entering the building, dries the store entrance during wet weather, and melts snow and ice.

Spilling a stream of air to the outside has another advantage—cats and dogs hesitate to enter when a breeze hits them. It is claimed they will not enter except when coaxed.

• **Cost**—The minimum cost of installing air curtains in new buildings—the most practical application—is \$500 a

There's \$50,000 hidden in this room!

...Here's how
Auto-Shift tables
can help you find it!



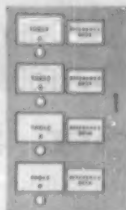
Replacing these conventional boards-and-desks with Hamilton Auto-Shift tables gives up to 50% expansion, without costly new construction. Read how Auto-Shift saves \$50,000 in this one example.

Here are the facts . . . You can enlarge your engineering department in two different ways. With time-consuming, costly new construction, averaging \$25-per-square-foot or \$1500-per-draftsman. Or, by replacing present tables with Hamilton Auto-Shifts, which increase space efficiency up to 50%, overnight!

Designed for row installations, Auto-Shifts put reference and storage space directly behind each draftsman (see diagram). Each 250 square feet accommodate two more Auto-Shifts than separate boards and desks! Example above: Department increased from 70 to 100 men. Construction cost saving—\$50,000 or more!

No work interruptions, no delays

This wonderful change can be made overnight—without the loss of a single man-hour, without a day's delay. Auto-Shift tables let you add vitally needed men *now*, and your savings start immediately!



In about 250 square feet—4 men work at conventional tables and desks—6 men work, better and faster, at Auto-Shift tables.

Every man produces more . . .

The man at the Auto-Shift gets more work done, with far less fatigue. Counterbalanced top adjusts instantly, effortlessly, for frequent change of work position. In installation after installation, Auto-Shift users report increased quantity and quality of work quickly repay initial cost.

GET THE WHOLE STORY, NOW!

The day this coupon is received, Hamilton will send you a brochure which explains in precise detail what re-equipping with Auto-Shift will mean to your company. This is too important to delay—send for your copy of the Hamilton Auto-Shift story right now!



Hamilton Manufacturing Company
Drafting Equipment Division
Two Rivers & Wisconsin

Please send complete details on Auto-Shift tables to:

Name _____

Firm _____

Address _____

City _____ State _____

Hamilton

DRAFTING EQUIPMENT

HAMILTON MANUFACTURING COMPANY, Two Rivers, Wisconsin

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NO BARGAIN

FOR UNIFORM

FLAT SPRING

PERFORMANCE

According to the deflection formula for flat springs, the deflection or load of flat springs will vary in direct proportion to the third power of the thickness.

This means that flat springs made from .010" ordinary commercial flat rolled high carbon strip (standard gauge tolerance $\pm .001$ ") can be off as much as 33%, plus or minus, in deflection or load value.

Where the nature of the service calls for more uniform spring performance, CMP produces restricted thickness tolerances which make possible load tolerances of $\pm 10\%$ or less. CMP is regularly supplying such uniform restricted tolerances for special flat spring applications, multiple-station progressive die forming and other specialized end products where uniform, extra-close gauge accuracy reduces fabricating costs and waste and provides better product performance.

If you have a flat spring problem, you are invited to avail yourself of CMP's specialized knowledge and experience in this field.



the Cold Metal Products co.

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ft. (Footage refers to width of opening.) Operating costs are estimated at between 15¢ to 25¢ an hour.

Air curtains are available for different size entrances; but the largest application so far is for a Swiss store with a 40-ft. entrance.

Folding doors replace the air curtain at night.

• **The Developers**—The developers of the air curtain, Sulzer Bros., and SIFRAG, both Swiss concerns, reportedly are locked in a fight over patent rights. Each claims it should have exclusive rights. Both companies are selling the idea in the U.S. SIFRAG has licensed the American Air Curtain Corp., St. Louis. And Sulzer has an American subsidiary, Sulzer Bros., New York, handling U. S. installations.

A Kroger supermarket in Cincinnati is the first American store to try the air-curtain door. It has an 11-ft. entrance. Grand Union plans a similar installation in one of its New York supermarkets. Both of these jobs will be handled by American Air Curtain Corp.

Where no extensive alterations have to be made, a unit can be installed in approximately a week. This includes refrigeration and heating controls and power operation.

NEW PRODUCTS BRIEFS

A thermostatic water control that can prevent your being suddenly scalded or chilled in your morning shower is being produced by Powers Regulator Co., Stokie, Ill. You attach the control unit to your shower, set a knob on the unit to the water temperature you want. From there on, say the makers, the unit takes charge. It compensates instantly for drops or increases in water temperature or pressure. Price: \$60.

American Can Co. has introduced a food can that's coated with aluminum instead of tin and that has welded side seams in the place of the usual soldered ones. The aluminum coating is said to give better protection to the can than tin. And the welded seams, which eliminate use of lead and tin solder, are said to be stronger than conventional soldered seams.

Bogue Electric Mfg. Co., Paterson, N. J., has announced a high-power silicon rectifier for which it foresees uses in the guided missile and aircraft industries. Silicon rectifiers, says Bogue, are lighter than conventional selenium rectifiers. The company also says silicon rectifiers' efficiency can exceed 90%, whereas selenium rectifiers are said to have an efficiency of 80%.



COVERING POWER

One of the important jobs usually required of a chemical coating—such as a printing ink or an industrial enamel—is to blanket the surface beneath. In such cases the covering power results from the right pigment, the right degree of dispersion, the right refractive index between pigment and vehicle. The Interchemical approach to such performance problems is a technical attack based on fundamental research, supplemented by lessons learned in serving many industries over many years. If your product requires a chemical coating for protection, decoration or communication, we offer the authority of specialized experience.



One of the factors influencing covering power is the size of the pigment particles. Interchemical laboratories use "pilot-plant" equipment such as this roller mill to obtain correct pigment dispersion.

Interchemical

C O R P O R A T I O N

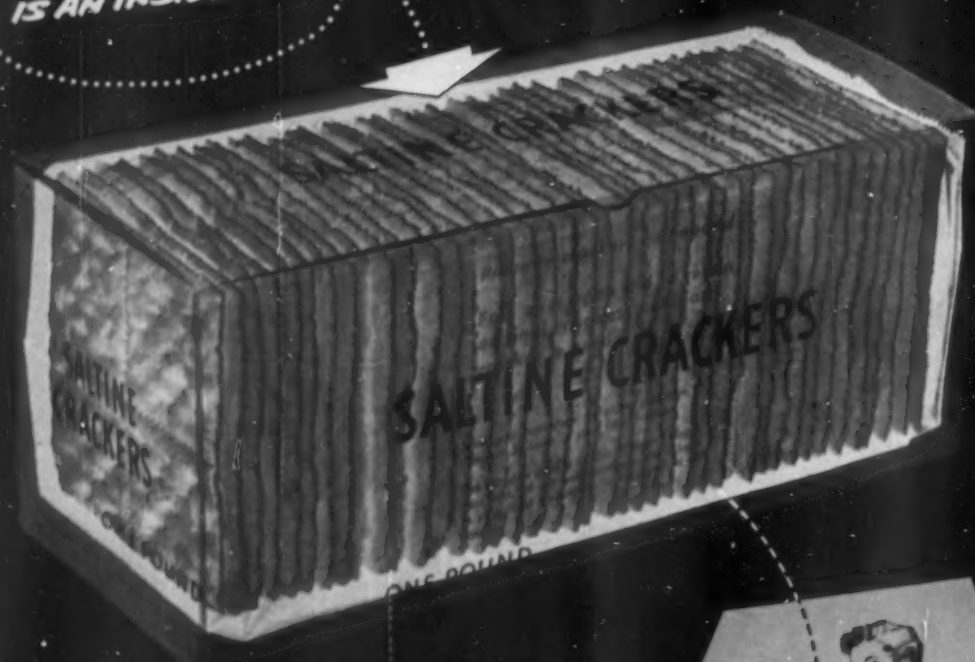
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TRADEMARK

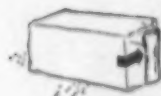
CRISPNESS
IS AN INSIDE JOB



X-Ray Photograph of actual cracker package



Ever wonder why some crackers taste fresher than others? The X-ray photograph above contains the answer. Inside this box of crackers is an inner bag of wax-laminated Rhinelander Glassine paper. This dense, almost impenetrable paper keeps moisture-vapor from robbing crackers of their crispness.



The inner bag has excellent dead-folding qualities . . . can be opened and positively re-closed many times, protecting cracker crispness to the very last one! Glassine does this job economically—actually at a lower unit cost than most other protective packaging materials. If you have a product requiring a moistureproof package, let us show you how economically Rhinelander Glassine can work for you.

Our packaging engineers can recommend the right protective grade for you. When writing, please state application.



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INTERNATIONAL OUTLOOK

BUSINESS WEEK

DEC. 3, 1955

A BUSINESS WEEK

SERVICE

As Bulganin and Khrushchev move on to Burma it becomes clear that India's Prime Minister Nehru has fallen into a trap—of his own making.

By providing the Soviet leaders with a national platform, Nehru gave them just the break they wanted in India:

- To undermine his policy of neutrality—which he has built into almost a state religion in India and a force in world affairs.
- To preach Communism to the Indian masses over his own head and thus give India's Communist party the biggest lift it ever had.

Take a look at what happened in Bombay within the space of three days.

On Nov. 19, the Bombay Communist Party unleashed a bloody riot under the guise of opposition to government plans for changing the city's administrative set-up. In the process, the Reds proved that in a pinch they, and not Nehru, could control Bombay.

On Nov. 21, Bombay gave Bulganin and Khrushchev the most handsome welcome of their tour. The same city officials and local Congress Party leaders who had been stoned two days earlier rolled out the red carpet for the Russians.

Consider, too, the Moscow directive—that has just come to light—to the bosses of India's Communist Party. In this document Pravda editor and Presidium member Dimitri Shepilov explains how the Communists can take over from Nehru. He urged them to:

- Push for the rapid industrialization of India through state planning; encourage the Nehru government to enter an industrial race with Red China.
- Infiltrate all organizations involved in the new five-year plan (but he warned them not to attack Nehru personally).

The whole affair is bound to hurt Nehru's lofty standing in India—no matter how he reacts when the Soviet leaders go home.

Already some of India's leading newspapers have balked. They object especially to the way the Soviet leaders turned a goodwill mission into a propaganda offensive.

Nehru's blunder also is arousing opposition from (1) the conservative wing of the Congress Party; (2) Indian army brass; and (3) education leaders who object to the way Nehru exposed India's children to Communist propaganda.

—•—

The Eisenhower Administration has about decided to ask Congress for more flexibility in allocating next year's foreign aid funds.

If the plan goes through, Washington will be in a better position to counter the Soviet economic offensive in the Middle East and South Asia.

It's a compromise between two groups in the Administration. One wants a bigger and bolder aid program, and the other thinks the present program is adequate. It won't necessarily end the first group's pressure to have Pres. Eisenhower also ask Congress to enlarge the aid program.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

DEC. 3, 1955

several hundred million dollars. This would be over and above money requested to aid individual countries. The emergency fund would be made available for several years instead of just one.

Here's the reasoning behind the new emergency fund proposal:

At this stage the Soviet economic threat is too vague to justify any big expansion of our aid program. All that's needed is enough flexibility to meet Soviet moves as they develop.

—•—

The Administration's foreign trade policy is heading into what may be its stormiest conflict. The issue: cotton.

A Congressional free-for-all is shaping up over exports of raw cotton and imports of cotton textiles. An alliance is emerging between cotton farmers, who want the U.S. to "dump" its huge cotton surpluses on world markets, and cotton textile makers, who want quotas on textile imports.

The fight will focus on a bill to give the Agriculture Dept. a mandate to take any action necessary to regain the U.S.'s historic share of world cotton markets. At the same time, the bill would set a stiff quota on U.S. cotton textile imports.

The Administration is preparing for a fight. It objects because the bill would weaken Eisenhower's liberal trade policy. And it would strike hard at Japan's struggling economy.

Beyond that, quotas for cotton textiles would open the door for a string of demands for other quotas. And cotton dumping could have serious diplomatic repercussions. It might push Egypt into Soviet clutches, to say nothing of stirring anti-Yankee feeling in Brazil, another key cotton producer.

The White House feels it has a solid argument in opposing the textile quota. True, imports from Japan are up threefold. But they are still less than 1% of U.S. production. The U.S. industry seems in good shape, and is exporting a lot more than the U.S. imports. **Washington strategy:** Split the cotton growers from the textile men by pointing out that U.S. cotton exports to Japan are much greater than imports of Japanese textiles. Indeed, Japan is the best market in the world for U.S. farm produce.

—•—

Western experts on Russia speculate about the recent purge in Soviet Georgia.

Moscow ticketed the victims as henchmen of Beria. But some of them once were involved with ex-Premier Malenkov. So some experts, especially those in London, think that Malenkov's number may be up.

—•—

Fall of the Faure government this week makes it almost certain that Mendes-France will return to power next year.

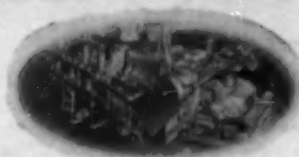
The ex-Premier won't make it right away. Faure's defeat may lead to early elections—and that would return about the same kind of Assembly as the present one.

Result: another right-of-center government.

But this couldn't be anything more than a caretaker government—just as wobbly as Faure's has been. So it wouldn't be hard for Mendes-France to force another election. Meanwhile he could build up his reputation as the only man able to give France stable government.



Machines that do one job today and another job tomorrow



THROUGHOUT THE WORLD Hartford-Empire Gob Feeders are used to serve forming machines with molten glass—shaped for best manufacture of all types of glassware.

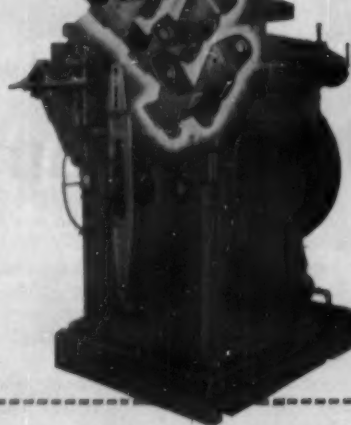


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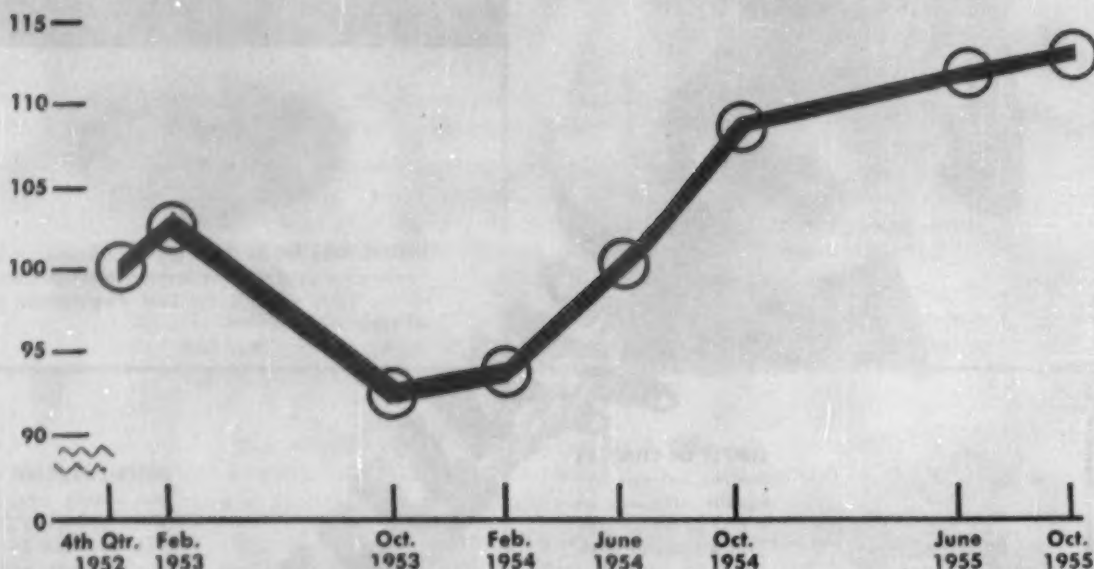
Company

Street address

City Zone State

The Index of Consumer Confidence

Nov.-Dec. 1952 = 100



Data: Survey Research Center.

©BUSINESS WEEK

Survey Research Center's new probe of people's intentions finds . . .

No New Steam Here for a Boom

Business gets a brand-new warning this week: The consumer cannot be counted on to put new impetus into the economy. He seems set, for the most part, to keep up the pace at which he has been going. Beyond this, he makes no promises.

This is the major conclusion that the Survey Research Center of the University of Michigan draws from its latest quarterly survey on consumer intentions, issued this week. The October survey was based on a cross-section of some 2,000 families in most parts of the country.

You can see the reason for the warning graphically in the chart (above). It shows how the index of consumer confidence has flattened in the last few months.

Its warning sounds the more clearly because last year was a period of sharply rising optimism. The flattening started to show between October, 1950, and June, 1955 (BW-Aug. 6 '55, p42). And

now the upward thrust has subsided to a bare crawl—a one-point rise in four months. That is just half as fast as it rose in the preceding eight months, when it went up four points.

• **New Methods**—At this stage it is impossible to say for sure how much weight to attach to this deflating line. Currently, George Katona, program director of the center, and his researchers base their index of confidence on how people feel about their personal financial situation—now and to come; how they feel about business conditions generally; whether they think it's a good time to buy; what their specific buying plans are for big-ticket items. The researchers plan soon to add other factors and may make some changes in the weighting of its components.

But a businessman would be rash to ignore the signals altogether. Katona and his men are proud of the correlation between their index and the percentage of consumer income spent on

durables. If this pride has a solid foundation, the big question is: Is it more significant that that index is today at an all-time high, or that the consumer's wonderful upward bounce of the past year seems to be subsiding?

Katona, a cautious analyst, doesn't answer. Instead, he says: "When such economic indicators as the index of industrial production or of retail sales fail to register some growth over an extended period, economists have learned to regard this as a danger signal, even if the level of these indicators is high. We do not yet know whether lack of growth in optimism should also be viewed as a danger signal." He has always held that it is a change in direction, rather than a change in degree, that is important.

But it is possible to get a bit more light on consumer's intentions by looking deeper at some of the answers to the survey's key questions. For that closer look, turn the page.



"Right off the bat I noticed that Wausau people are proud of whatever job they do. Take young Jerry Olshanski. I met Jerry on his newspaper route. Since I used to deliver papers, too, we had some fun kidding about the best way to 'roll for a throw'. By really sticking to his job, Jerry's been able to buy himself a bicycle, a boat and even an outboard motor. While we talked Jerry kept right on working. He prided himself on never keeping a customer waiting."



"One of the things I liked most about Wausau is the *friendliness* of the folks I met. I wanted to find out about them, but they were just as interested in knowing who I was. Something Bob Hertz (left) of the Hertz South Side Drugs said really stuck with me. 'Whatever we do in Wausau—whether it's a community project or business—we try to do the best we can'. Bob's a good example. His store has shown a gain every single month for 9 years."

"They really have their hearts in their business,"
comments Dr. West's John Weber, as he visits
Wausau, Wisconsin, to tell this

Wausau Story

In the pictures and captions on this page you will find three interesting examples of the 'Wausau way' of doing business—as told by John "Jake" Weber, assistant to the President of Weco Products Company (makers of Dr. West's dental products). You will find still another example of this energetic Wausau personality in Employers Mutuals. Here is our story.

Employers Mutuals writes all lines of casualty and fire insurance, including automobile. And we are one of the very largest in the field of *workmen's compensation*.

Our policyholders include some of the country's best-known firms. Yet a great part of our business is with

companies employing a small number of people.

Policyholders like the way we handle their claims—with speed and a fairness that bends over backwards. They like the *extras*, in service and understanding, that are behind every Employers Mutuals of Wausau policy.

All policyholders, large and small, appreciate our fresh enlightened view of workmen's compensation. We don't believe such insurance is just a convenient way to pay accident claims. Under Employers Mutuals' supervision, it can actually lower costs of production and improve overall profits. Phone our nearest office, or write Wausau, Wisconsin.



"You don't hardly get this kind anymore. An old-fashioned popcorn wagon! It's been operated in the same spot in downtown Wausau for 33

years!...by Herb Eiden as it was by his Dad before him. 'It's like a hitching post' says Herb, 'where people can relax and forget their problems a bit.'"

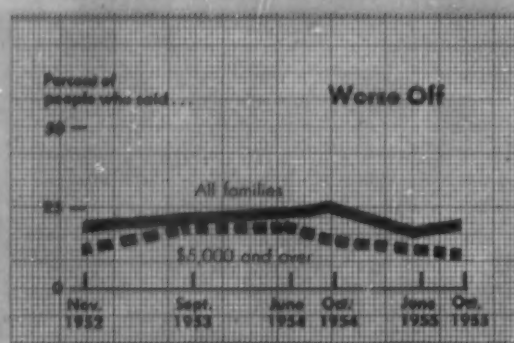
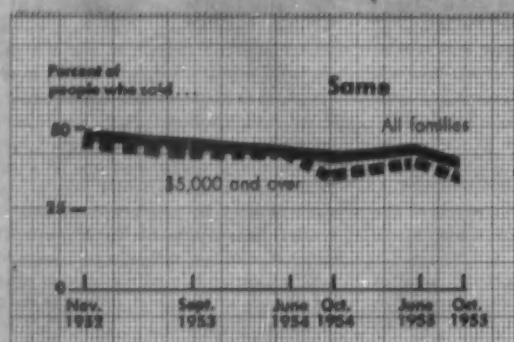
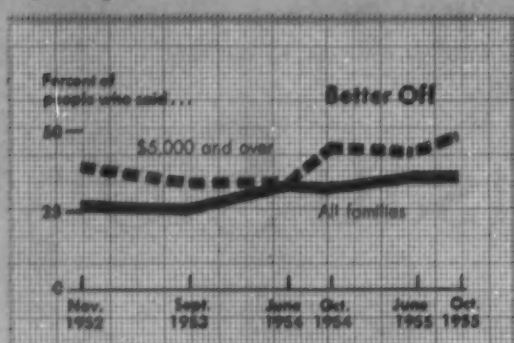
Employers Mutuals of Wausau



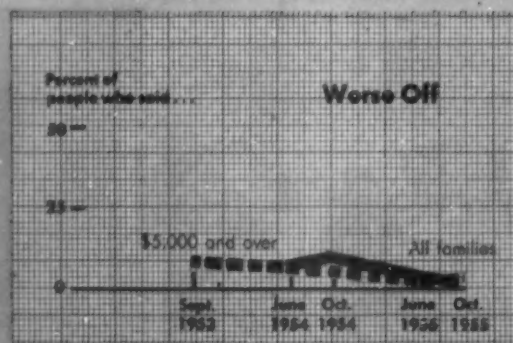
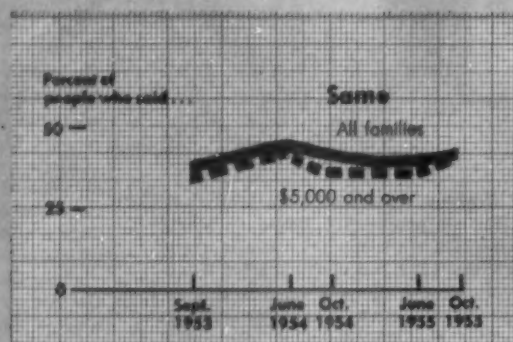
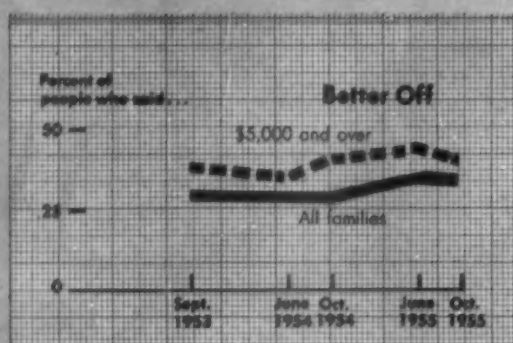
"Good people to do
business with"

QUESTION:

Would you say that you and your family are better off or worse off financially than you were a year ago?

**QUESTION:**

Do you think that a year from now you will be better off financially, or worse off, or just about the same?



These Factors Mark Halt in Confidence—

Consumer Intentions starts on page 158

SOME COMFORTING factors for businessmen stand out from the picture of confidence among consumers that has just come from the Survey Research Center of the University of Michigan.

For instance, George Katona, program director of the center, says that there's no clear reason why the slow-down should be a danger signal.

General business conditions improved somewhat between the time of the last survey, in June, and the time of the latest survey, which was made in October. And so, he says, there's validity in the argument that the expectation of "no change in our situation" has a more favorable connotation now than it would have had in June.

Beyond Katona's own view, there are

other factors that tend to reduce the apparently ominous appearance of the new index of consumers' confidence.

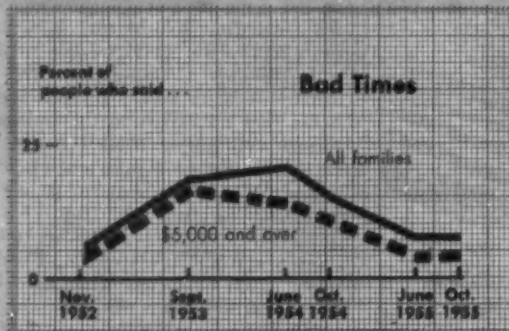
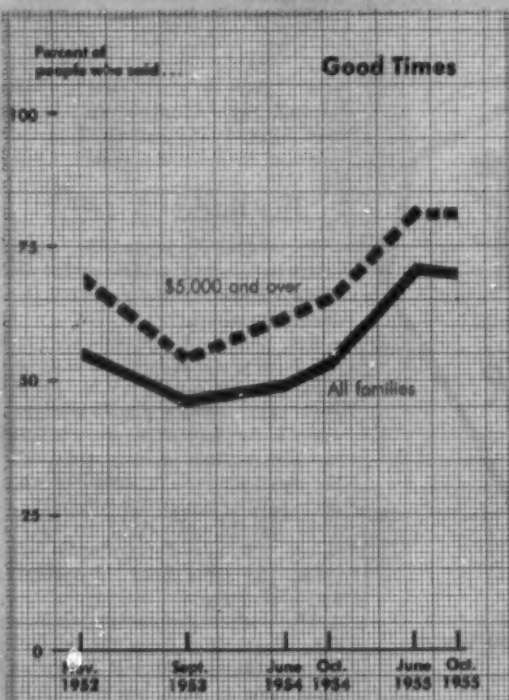
I. The Brighter Side

Those factors come from among the answers to the survey's key questions. Together, they show that while the consumer doesn't plan to step up his spending rate, he's not likely to reduce it either. Here are the factors:

• **Personal Finances**—For all income

QUESTION:

Do you think that in the country as a whole during the next 12 months we'll have good times financially or bad times?



QUESTION:

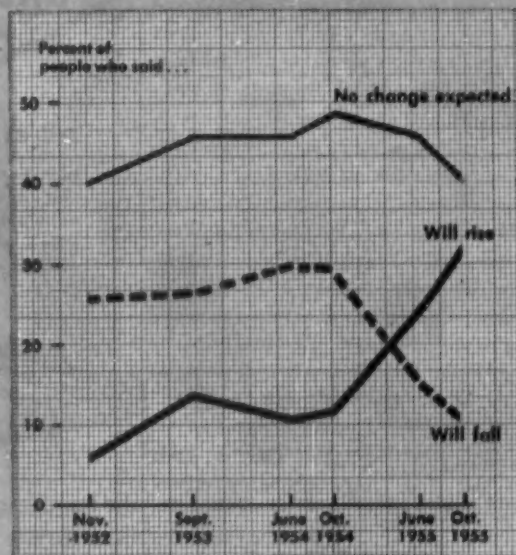
Do you think now is a good time or a bad time to buy such large household items as furniture, house furnishings, refrigerators, stove, TV, and the like?

	Nov. 1952	Sept. 1953	June 1954	Oct. 1954	June 1955	Oct. 1955
Good time to buy	26%	36%	43%	48%	55%	55%
Good time in some ways	14	13	11	13	12	9
Bad time to buy	40	38	33	28	18	19
Don't know or not ascertained	20	13	13	14	15	17

These percents do not add up to 100%.

Peoples' Price Expectations:

More people expect prices to go up



But They Don't Spell Danger

groups, 36% of the families feel better off than they did a year ago. That's just a shade more than felt better off in June (34%), and up perceptibly from the 30% who so reported in October, 1954. The most important spending group—those with incomes of \$5,000 and over—went along with this feeling. Of these 49% said they felt better off, 13% worse off.

Again, when asked to look ahead a year, 36% of all families expect to be better off than they are today; 44%

think they'll have just the same; only 5% expect to be worse off. That represents only a microscopic decline—one percentage point—from the confidence they had in June.

• **General Business**—Similarly, in evaluating general business conditions, some 48% in all income groups feel conditions are better than they were a year ago. Almost exactly the same proportion felt that way in June. But at this time last year only 20% had the same degree of optimism about business.

Looking into the immediate future, 71% of all families expect good times for business generally during the next 12 months; among the higher-income groups, a whopping 82% are highly optimistic. This again represents practically no change from last summer (72%), though it's a sizable jump from October, 1954, when only 54% of all families expected business improvement during the year. The optimism holds for the next five years.

• **Spending Plans**—Finally, on the key

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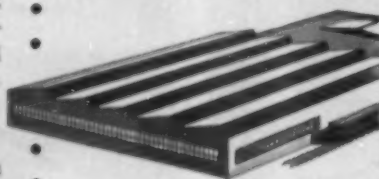
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question, "Do you think now is a good time to buy large household goods?" 55% of all families answered "Yes." This, too, is the same percentage as in June, and compares with only 45% who felt so in October, 1954.

Plans to buy houses and automobiles are about as frequent as they were in June. Other durable goods buying plans "show a small (but statistically insignificant) increase in frequency over June, 1955, and are fully as frequent as in June or October, 1954."

II. The Darker View

If, in the aggregate, the consumer shows little mind to slow up his present speed of consumption, where do the danger signals lie?

Few people will point with alarm to the tiny drop in the percent of all families who expect to be better off next year. More significant, to the wary, is the way upper-income families feel about their personal prospects for the next year. The number who expect to be better off dropped from 46% last June to 42% in the latest survey. So now this group is back to about the same level of optimism it had a year ago.

The other important unfavorable vote also comes from the \$5,000-plus group. Some 61% feel that now is a good time to buy, but 68% felt that way in June. Similarly, the percentage in the same income group who think it's a bad time to buy rose from 12% in June to 15% in October.

Inflationary Fears—Apparently an important factor here is the widespread belief that prices are on the uptrend—though few people think the rise will be sharp. Between June and October, the percentage who look for price rises in household goods rose from 25% to 33% and those who expect cars to cost more rose from 26% to 37%. Furthermore, asked to specify what particular things worried them—war, inflation, unemployment, depression, and the like—more people cited inflation than anything else. Only 27% of urban families were not concerned. Inflation can inhibit buying—though it's still an open question whether the prospect of higher prices spurs buying or slows it down.

The fact that a large chunk of the public is currently in debt obviously has a bearing on how people feel about buying more now—though the center states that it does not appear to affect plans "greatly." Roughly 45% of the families surveyed reported they were already carrying some instalment debt. Of these, about a fourth said they find keeping up their payments a hardship. Among the other three-fourths, about a third said their debts forced them to postpone other purchases;

another third said, "We always spend carefully"; the remaining third didn't find their debts a bother.

Whether payments are a hardship seems to depend more on income than on the amount of the debt itself. Only 13% of those in the \$5,000-plus group felt pinched by their debts, while 44% of those in the under-\$3,000 group felt a squeeze.

• **Auto's Barometer**—There's one last tipoff to a possible consumer slowdown. Though there has been no change since June in the percentage who expect to buy cars, the figure is down from October, 1954. But, says Katona, the drop is "less than 10%."

The center's final report is based on the reactions of "all families," and of those in the \$5,000-up bracket. Generally, the further down the income scale you go, the less optimism you find. This gap has been typical of the center's findings, but it is a gap that appears to be closing. In the past, it has been closing because of greater optimism from the lower groups. But this time the narrowing seems to stem from greater pessimism among better-heeled families. The index for the upper-income group showed a slight drop—though it's too small to be statistically significant, says Katona.

III. Three Conclusions

Since industry appears to be going all-out for expansion (BW—Oct. 12 '55, p. 27) it's fair to ask how much a slackening in consumer "expansion" may cost the economy as a whole. Will industry's promised activity take up any slack that might appear? This could be answered two ways: On the one hand, any real sign of a consumer slowdown in the market would mean a sharp curtailment of commercial expansion—and that would just irritate a sore spot in the economy. On the other hand, a consumer slowdown would be less likely to affect heavy industrial expansion—and that expansion would help keep consumer income up, thus tending to offset the consumer's initial balkiness. Furthermore, the promised tax relief next year may mean that people (especially in the lower-income groups) will find themselves better off than they now expect.

• **Choice of Feelings**—So the optimists simply ask the question: "How confident can you get, anyway?" The pessimists answer, No news is bad news; just keeping up the present pace isn't good enough for an economy that is geared to more and more consumption.

And between the two lies the middle-of-the-road warning: The consumer is doing fine. But don't count on him to put more steam in the economic engine than he's putting now. **END**

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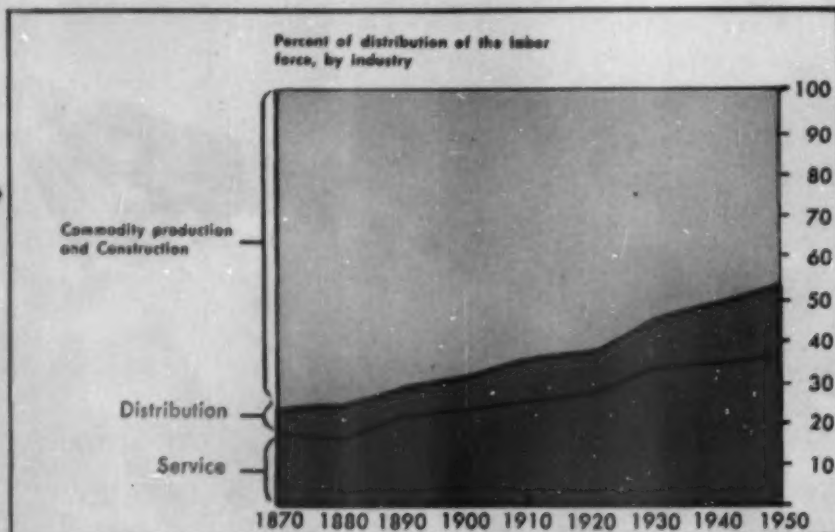
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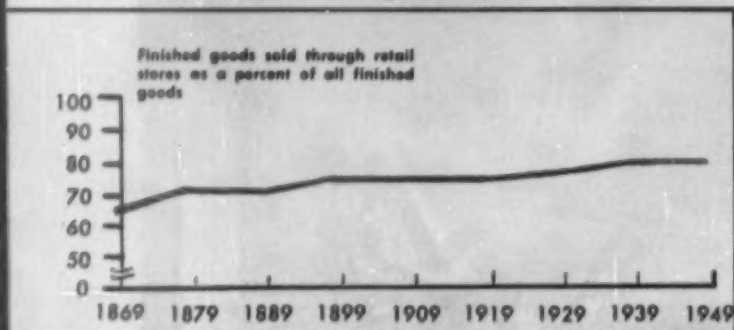
DESIGN, MANUFACTURE, ENGINEERING AND ERECTION OF COMPLETE BULK MATERIALS HANDLING SYSTEMS

The percentage of workers in distribution has increased sharply; in production it has shrunk.

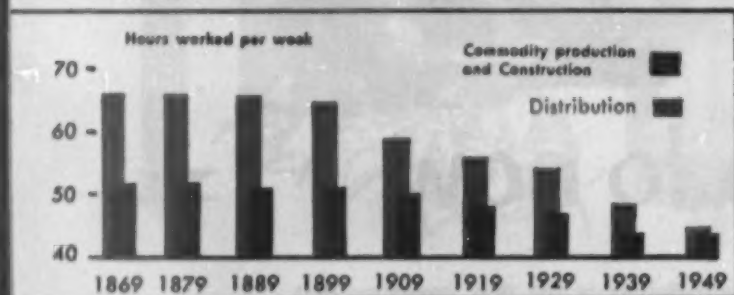
Here are three big reasons for the shift



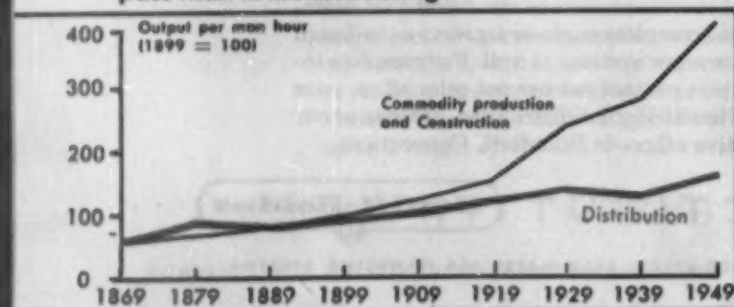
The share of the nation's goods handled by wholesalers and retailers is greater.



The shortening work-week has hit distribution harder.



Productivity in distribution has increased at a slower pace than in manufacturing.



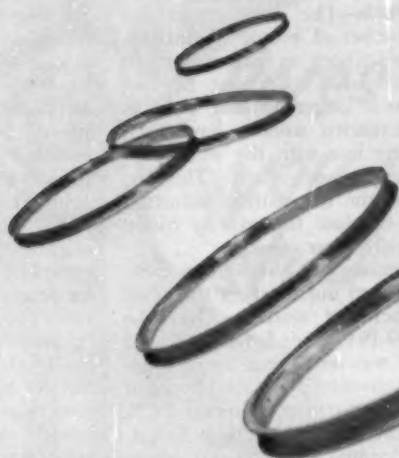
Gauging Costs of Distribution

The charts on this page should add up to one thing—an increase in the cost of distribution. But do they?

The answer, according to Harold Barger of Columbia University, who assembled the data, is no. Barger is the author of a new and important study called *Distribution's Place in the American Economy Since 1869*, sponsored by the National Bureau of Economic Research and published this week by Princeton University Press (\$4.50). In scope and concept, this study of employment, productivity, and costs of distribution follows in broad outline the previous studies of manufacturing, mining, and other industries pioneered for the National Bureau by such economists as Solomon Fabricant.

• **Conclusion**—Barger's conclusion is that the cost of distribution—or what he and other economists recently have come to refer to as "value added by distribution"—remained remarkably steady in the 1929-1948 period. This stabilizing of distribution costs followed a slow, long rise from 1869 on, during which time distribution costs, as a percentage of final retail value, rose from 32.6% to 37% in the late 1920s. But after 1929, Barger finds, costs leveled out. The figure he arrives at for 1948 is 37.4%.

The percentage covers the gross spread, which Barger defines as "the difference between the value of commodities leaving the distribution system and the value when they entered



this bicycle race cost \$20,000 every year!

In bicycle manufacture, the race is to the swift. It takes smooth, high speed production methods to produce the best—profitably.

This was the problem of one of the world's leading bicycle builders. An important operation involved punching 36 spoke holes simultaneously in every wheel rim. To lubricate the punches and dies manually, a cover had to be left open. Dies and punches were blocked by accumulating scrap. Wear was such that they had to be replaced once a week. The cost on all four machines used in the operation ran into \$20,000 a year. Punching those rim holes was making a sieve of the budget.

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it." By distribution system, Barger means wholesaling and retailing, his study being confined to "finished goods and construction materials whose eventual outlet is some sort of retail store."

The stabilizing of distribution costs during the past 30 years or so may surprise a number of people, businessmen included, who have been convinced that distribution costs are rising.

• **Missing Link**—What has been lacking, of course, is precise and reliable figures. Indeed, the general field of distribution and marketing costs remains one of the murkiest in the whole economy. This has been due only in part to an absence of figures, which were not collected on a widespread and systematic basis by the government until around 1929. It has also been due in part to the difficulty of defining what distribution is—what functions it includes and who performs them.

Barger assembled an enormous amount of data in order to run his figures back to 1869. The National Bureau says that Barger's are "the first figures ever assembled to cover the history of distribution industries in the period before World War I."

I. Broad Changes

Barger's labor has brought forth clear evidence that enormous changes have occurred in the American economy and society since 1869 in the distribution function.

Back in 1860, for every 1,000 workers in production industry (including agriculture and mining), there were 100 in the distribution industries handling the goods produced. By 1950, this had changed to a ratio of 400 to every 1,000 workers in production. The revolution assumes even greater proportions when you throw in the rest of the "services"—transportation, finance, personal service, government. Except for government, these people are involved at least in part one way or another with the distribution process. All told, the people in distribution and services now make up slightly more than one-half of the employees in all industry (chart, page 166).

• **Changing Times**—Part of this extraordinary growth has been due to the increasing complexity of a society turning out a greater variety of goods and providing an ever-growing list of services. This in turn has produced an ever-increasing degree of specialization in function. Where many goods were once consumed by the producer—the food grown and eaten by farmers is a good example—or were distributed directly by the producer in his local market, more and more goods now pass into distributive channels (chart).

Barger finds that during the 1869-1949 period, there was an annual growth

of output in the production of finished goods for domestic use of 3.2%. Total volume of finished goods sold through retail stores, however, increased at a slightly greater annual rate—3.4%.

• **New Ratio**—The increase in the relative number of people in distribution has also been in part the result of improved labor conditions. Starting with a much longer working week in 1869, distribution workers have been brought into line with the work week in other industries (chart). This has meant that the distribution industries have had to close the gap by hiring proportionally more workers.

At the same time, their productivity record has been much poorer than that of manufacturing workers. Over the whole 1869-1949 period, Barger figures that there was an annual average improvement in output per man-hours of about 1% in distribution versus 2.6% in commodity production. Says Barger:

"No individual developments occurred that rank with the coming of gasoline power in agriculture, mechanical loading in mines, or the electrification of factories. One is indeed left with a feeling of surprise that man-hour output in distribution rose as rapidly as it did."

• **Gap**—What, then, explains the stabilizing of distribution costs in recent years? It is not explained certainly by productivity, which lagged behind other industries. It might be explained by the difference in the rate of increase in wages. But Barger finds that the rate of increase in distribution wages has pretty much kept pace with that in the production industries.

Nor is it explained by the abandonment of service by retailers. Barger thinks that on the whole retailers offer the customer more service than in the past. They provide better plant facilities, more liberal merchandise return policies, more credit in some instances. But he qualifies this by pointing out that in some areas—self-service in food stores notably—merchants have pushed some of their former functions onto the consumer. He concludes that "distribution probably accompanies the handling of commodities with somewhat more service on the average than in 1869, but that everything considered the change is not large."

Major shifts in function have also, of course, occurred elsewhere. There has been, for instance, an over-all decline in wholesaling. In some instances, this has shifted such functions as collecting, sorting, and storing goods onto retailers, a case in point being the assumption of these functions by department stores after the virtual demise of the old full-line wholesaler. Wholesaling costs also were shifted to the department store, raising the latter's gross margin—merely a shift in cost

from one segment of distribution to another.

II. Institution vs. Function

However, it is these very shifts in function that in the end probably go a long way to explain the stability of wholesaling and retailing costs. Unfortunately, this is an area not fully explored by Barger because he chose essentially an institutional approach to distribution rather than a functional approach.

By limiting his concept to what might be called the formal distribution system, Barger does not account fully for several major distributive functions, two of the most important being "central office" sales activities of manufacturers and national advertising. Yet he himself points out that in recent years there has been an enormous growth in national advertising and sales expenditures by manufacturers. And he cites estimates of manufacturers' sales costs running as high as 15% to 20% of sales.

At the same time, Barger stresses the fact that as a part of the shifting of distribution functions, packaging—once carried on extensively at the distribution level—has been largely shifted back to the factory level.

• **Omissions**—How much has the centralizing of advertising, packaging, and sales functions served to increase the cost of distribution—or to make it more efficient?

There is no clue in the book to suggest how much of the marketing function has now been assumed by producers of goods. Nor is there any clue as to the effect on distribution costs of vertical integration, which in many cases has closed the circuit between raw products and finished goods.

These are only a few of the questions raised by the Barger book. Other omissions in the study:

• Freight costs up to the wholesale level are not included in Barger's figure for the cost of distribution.

• The merchandising activities of producers or distributors of unfinished goods are included in production costs. (Barger estimates this comes to about 5% of all distribution activity.)

These omissions help to explain the big gap between Barger's estimate of distribution cost as 37% of the price consumers pay and estimate of 59% made by the Twentieth Century Fund in its famous study, *Does Distribution Cost Too Much?*, in the late 1930s.

Barger's contribution is his wealth of data and his useful yardsticks for measuring productivity, employment, and costs in wholesaling and retailing. But it is clear that more work must be done before we get a true measure of distribution costs. **END**

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THE MARKETS

Wall St. Talks . . .

. . . about electronics for Abacus . . . mergers in paper . . . high cost of cash purchases.

International Hydroelectric System has received permission to turn itself into an investment company. The name it has chosen is Abacus Fund. When Abacus buys an electronic computer—that will be the day.

Mergers are blooming all over but nowhere more profusely than in the paper trade. What's more, many Streeters in coming months expect an even higher merger rate in this the nation's fifth largest industry. They point to the paper trade's keen desire for diversification, both by area and by product, and for vertical integration, which will permit them to acquire strict control over materials from logs to finished goods.

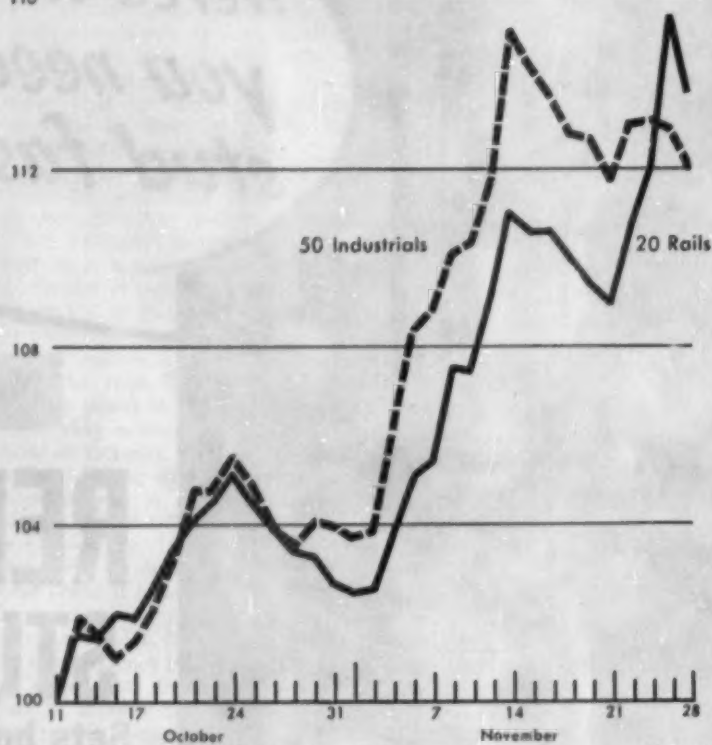
It takes plenty of cash to buy a company these days, if you can't get it via an exchange of stock. A good example is Gillette Co.'s recent acquisition of the companies that make and distribute Paper Mate pens. The group, which in the 12 months ended last June 30, racked up an after-tax net of \$3.1-million, cost Gillette \$15-million in cash, according to Pres. Joseph P. Spang, Jr. One attractive feature of the deal was Paper Mate's far-below-average tax bill, due to its substantial manufacturing operations in Puerto Rico, on which no income taxes have been paid or accrued.

American Tel. & Tel. last week made a nice little piece of extra change on the \$3.3-million of bonds (about 4 of 1% of its entire recent convertible bond offering) that stockholders, for some unknown reason (often carelessness), failed to take up. Mother Bell sold that block on the Big Board at 130½ compared with their original offering price of 100 to stockholders.

Another indication that many citizens are becoming economy-minded (BW—Nov. 19'55, p134): Not enough eligible voters turned out last week in Miami to O.K. some \$28.4-million of proposed bond issues. Under Florida laws, over half the registered property owners must vote in order to validate a bond election. Largest of the new issues proposed was \$12.7-million to finance a tunnel under the Miami River.

The Rails Catch Fire

October Low = 100
116



Flame Rises, Then Falls

Last week, as the industrial average was making dispirited attempts to push its way into new high ground, the rail average suddenly stole the spotlight. Until last Friday, the recovery by the rails from the Oct. 11 lows had generally lagged behind that of the industrials. Then the rail average spurred to its highest level since Oct. 15, 1930. It used the same sort of fuel that had sparked the industrial average—stock splits.

• **U. P. Leads**—The rails outburst was primed by a 5-for-1 split by a long-time favorite blue-chip, Union Pacific RR. The company also declared an extra dividend of \$3, which makes a total of \$8 a share for the year, compared with \$7 in 1954. On the strength of the split—and the usual parade of rumors preceding the fact—U. P. soared more than 20 points in a week. But the U. P. split was itself only the pebble in the pond—the pebble caused far-reaching ripples.

• **Induced Buying**—As they have all year with industrial stocks, speculators immediately started buying into other rails that looked ripe for a split. Evidently they figured that U. P.'s action would spur other railroad boards to vote splits.

To these speculators, the likeliest prospect was another high-grade rail, Atchison, Topeka & Santa Fe Ry. On heavy volume, Atchison jumped 11 points following announcement of the U. P. split—only to fall with a thud when the directors' meeting was postponed and rumors circulated that a split wasn't even being considered.

• **Wrong Approach**—To many Streeters, the speculative interest in the rails was distressing. "There are plenty of good reasons for buying rail stocks now, but the stock split rumors isn't one of them," one analyst glumly observed.

To the old-line theorists who regard the rail average as a vital indicator in confirming bull market moves in the in-



necessity is its mother

. . . but it has a father, too!

"Necessity is the mother of invention" — but the mere need for something is not fulfillment.

Man needed a wheel — but without imagination there never would have been one. Nor would there have been skyscrapers, printing presses, assembly lines, railroads or super-markets. Without imagination — the *father* of invention — men would still stay alive by scrabbling in the soil and hunting beasts for meat.

It's not strange that imagination has fathered more beneficial inventions in the United States than anywhere else. Imagination works best in a free society. Freedom prompts a man to action . . . gives him the incentive of being rewarded and recognized for his accomplishments . . . offers him the help of others who provide money to buy tools and build factories.

When you use your telephone, read your newspaper, board a train or hand a prescription to your druggist . . . when you take food from your refrigerator, buy a pair of shoes or step into an elevator — *be thankful for the American Way of Life which leaves human imagination free to come up with the answers to our needs.*

And make sure that the American Way is preserved with all the force and vigor of our lives to keep our country free and spiritually strong.

Norfolk and Western Railway



Black Light—New Time-Saver For Marking And Coding

Textile, apparel, appliance and other industrial plants across the nation are reporting major time savings in marking and coding operations. The secret: an invisible marking system called Black-Ray. Interesting details are reported in new Case History #116U, available from the Black Light Corporation of America.

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See Clues on page 190

dustrials, the stock split flurry represented an abortive swing that could throw any "normal" movement all out of kilter.

Many investors are still cool toward the rails because of disappointing past performances, but this year's net earnings should be the second best on record. Class I roads will total an estimated \$875-million, compared with a record \$903-million in 1953. For nine months, their earnings were 62% above last year, which was admittedly a poor year.

The rails have been holding down on costs, too, and much of the strength in this year's net has resulted from strict

cost-control programs by many roads. Carloadings are running around 12.5% above last year's levels, and the hot pace of business has caused the roads to order new freight cars on a large scale, resulting in a surge for the rail equipment manufacturers.

• **Industrials Lag**—While the rails were booming, then relapsing at midweek as profit-taking began putting dents in the rail average, the industrials labored just below the bull market highs. Splits in Montgomery Ward and Hercules Powder stoked the rumor mill anew, but as the year wears away, tax-selling is taking a toll in many issues.

Cash Dividends—13th Record in Row

Stockholders like boom times as well as the next man, but to them, a boom isn't measured by gross national product or industrial production—it's reckoned in terms of cash dividends. On the basis of cash dividends paid in first nine months on common stock listed on the New York Stock Exchange, it's pretty safe to say that 1955 will win the top spot in stockholders' hearts.

The Big Board reports that listed commons paid a record total of \$5,055-million for the nine months—the 13th consecutive record—and marking the first time nine-months dividends have gone above \$5-billion.


Of the 1,079 commons listed on the Exchange, 88.7% paid some cash in the first three quarters, and 48% of the payers upped their cash payments over 1954. Another 43% paid the same as last year, and 9% paid less. Despite

the generally fine business conditions, there were 27 issues that paid no cash dividend during the first three quarters of this year, but had paid in 1954.

Biggest gains, percentage-wise, were in aircraft companies, up 33.5%, building trades, up 35.8%, and U.S. companies operating abroad, up 37%. But the real bellwethers in the dividend picture are still utilities, chemicals, and petroleum and natural gas companies.

These three top all others in dollar volume of cash payments, and their \$2.3-billion total accounted for better than 45% of dividends for all companies. Also, the three groups accounted for just about 46% of the year-to-year gain in cash payments from 1954 to this year. Along with the automotive group and steel and iron producers, they racked up 61% of the total year-to-year gains in payments.

Stock Group	No. of Issues in Group	No. of Dividend Payers	Higher	Same	Less	Estimated Dividends (in millions) 1st 9 Mos. 1955	% Change 1st 9 Mos. 1955 vs. 1st 9 Mos. 1954
						1955	
Aircraft.....	28	26	21	3	2	\$81.2	+33.5%
Amusement.....	25	23	12	10	1	53.3	+13.3
Automotive.....	66	52	25	23	13	427.9	+12.8
Building trades.....	30	28	18	7	3	67.6	+35.8
Chemical.....	85	80	42	32	8	568.3	+18.3
Electrical equipment.....	24	22	9	11	2	169.8	+12.2
Farm machinery.....	6	4	3	1	1	40.0	+14.5
Financial.....	36	33	14	18	1	106.2	+6.1
Food products, beverages.....	71	65	28	29	9	179.0	+2.8
Lumber, leather products.....	10	8	3	5	—	16.8	+3.2
Machinery, metals.....	108	99	53	29	17	191.7	+15.2
Mining.....	39	30	16	13	2	150.9	+4.6
Office equipment.....	9	9	5	1	3	26.1	+10.2
Paper, publishing.....	41	37	19	17	1	112.6	+13.3
Petroleum, natural gas.....	50	44	26	16	5	790.1	+11.5
Railroad, railroad equipment.....	82	68	20	30	9	269.8	+13.0
Real estate.....	9	8	6	1	2	12.1	-4.7
Retail trade.....	70	63	23	33	8	233.9	+5.1
Rubber.....	9	8	3	3	3	49.3	+19.5
Shipbuilding and operating.....	9	8	3	3	3	17.9	+14.6
Steel, iron.....	38	33	15	12	7	243.4	+21.9
Textile.....	43	31	7	16	12	47.9	-0.5
Tobacco.....	15	15	4	9	2	67.8	-1.5
Utilities.....	110	108	57	51	—	953.9	+10.5
U. S. cos. operating abroad.....	23	18	10	6	3	43.6	+37.0
Foreign stocks.....	20	18	9	9	—	102.2	+15.9
Miscellaneous business.....	23	20	9	8	4	35.6	+17.9
Totals.....	1,079	958	460	404	121	\$5,055.4	+12.5%



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PERSONAL BUSINESS

BUSINESS WEEK

DEC. 3, 1955



Life insurance usually figures heavily in a man's plans for his family's future financial security. But often he doesn't pay enough attention to how the money will be distributed in the event of his death.

In fact, he is likely to overlook one of the best ways for his family to get the most out of the proceeds—the life-insurance trust.

Policyholders are inclined to think only of the two common methods of payment that they can elect. One is the lump sum, which of course pays the face value of the policy to beneficiaries. The other is the "optional settlement" plan, which pays out proceeds and interest periodically.

The second method has several advantages over the first—it cuts the chance of proceeds being quickly dissipated; money remaining with the insurance company continues to earn interest. And the policyholder has a fairly wide choice as to the amounts of payments and the period of years over which they will be made.

But it has disadvantages, too. Usually payments are fixed, which means the family can get no extra money in a particular period to meet an economic or personal emergency. And it may be impossible to change the manner of payment.

You can overcome this disadvantage—and get other important advantages—through a life-insurance trust. The reason is that, since it is a trust, it is an object of your creation. So you can mold it to meet your specific needs.

There are two basic ways to set up a life-insurance trust. One is to create the trust immediately and make it the beneficiary of your insurance policies. It goes into operation as soon as it gets the insurance proceeds after your death.

Sometimes you can use the trust while you're still living, in this way: Transfer income-producing property to the trust. Then the income can be used to pay premiums on the policy. (But note that you have to pay tax on the income that the trust uses for this purpose.)

The second way to set up a life-insurance trust is by will. Here your estate becomes the beneficiary of the policy. It turns over the proceeds to a trust.

This plan has two major drawbacks. First, if the probate of your will is delayed, so is the operation of the trust. Second, some states levy taxes against insurance funds paid into an estate, whereas they are not taxed if paid to a named beneficiary.

You have broad freedom of action in setting up either type of trust. For example, you can:

- Choose a trustee whom you know to be qualified to carry out your directions.
- Specifically direct how the proceeds are to be used—including giving the trustee the right to distribute the money according to family needs.
- Direct how the proceeds are to be invested.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

DEC. 3, 1955

your wife's ability to handle your estate. It's an added safety measure in case your wife dies before you do, or you both die in a common disaster. You can make your wife primary beneficiary of your policies and an insurance trust a contingent beneficiary.

Then, if you and your wife do die at the same time, your children's interests are still well protected.

Finally, a life-insurance trust can help supply liquid funds to your estate. It can buy up its nonliquid assets, for example, and hold them until they can be sold for a good price. Or it might buy the stock of a closed corporation, so as to keep the benefits of the firm in the family.

—•—

Signs point to the severest winter in years for many parts of the U. S. Among other things, that means driving a car will be more hazardous than usual. So it's a good precaution to review the winter driving rules:

Never assume that snow tires and chains make your car skidproof on a slippery road. They are of great help under certain circumstances, but they are no substitute for a dry road.

The only sure way of controlling a skid is not to let it start. Major causes to remember are excessive speed and sudden stops on slick roads. Also, avoid sudden swerves; make turns slowly and smoothly. And make sure brake adjustment is even and tires are properly inflated.

If you do go into a skid, the basic rule is this: Don't get panicky. Turn the front wheels toward the same side the rear-end of the car is skidding—but be sure not to over-steer. Don't put on the brakes. Keep the car in gear. Lift your foot from the accelerator slowly.

Extra weight in the back of the car won't do much to prevent skidding. But it will give added traction for slippery starts. And if you make the weight a 100-lb. bag of sand, you will have a hearty supply of dry material to sprinkle under the rear wheels if you should get stuck.

—•—

Note for home craftsmen: Popular Mechanics has just published a Do-It-Yourself Materials Guide, which sells for 75¢ on newsstands. The manual contains a wealth of information most homeowners use—the finished dimensions of each size of board and timber, grades of lumber, how to find the right material for a job, substitutes you can use, and the like.

—•—

Prolonged cold weather right now may boost the price of your Christmas tree as much as 20% this year. Reason: Trees are tougher to handle during cold weather, and it's harder to get people to cut them.

Nurserymen recommend balsam over spruce for Christmas trees. Balsam lasts longer, doesn't shed its needles so easily. But a spruce is likely to be fuller and have a better shape.

—•—

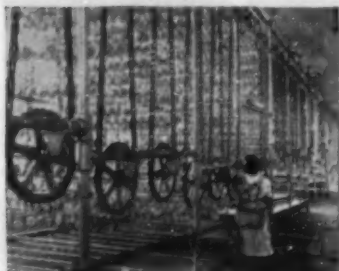
Art lovers on your Christmas list may like the unusual gift of an out-of-town membership to the Museum of Modern Art in New York. Members get four new art books each year, the museum's quarterly bulletin, free admission to the museum's galleries and films in New York. Price: \$13.50.

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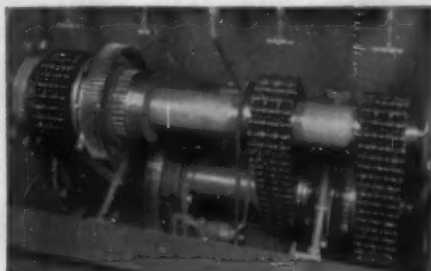


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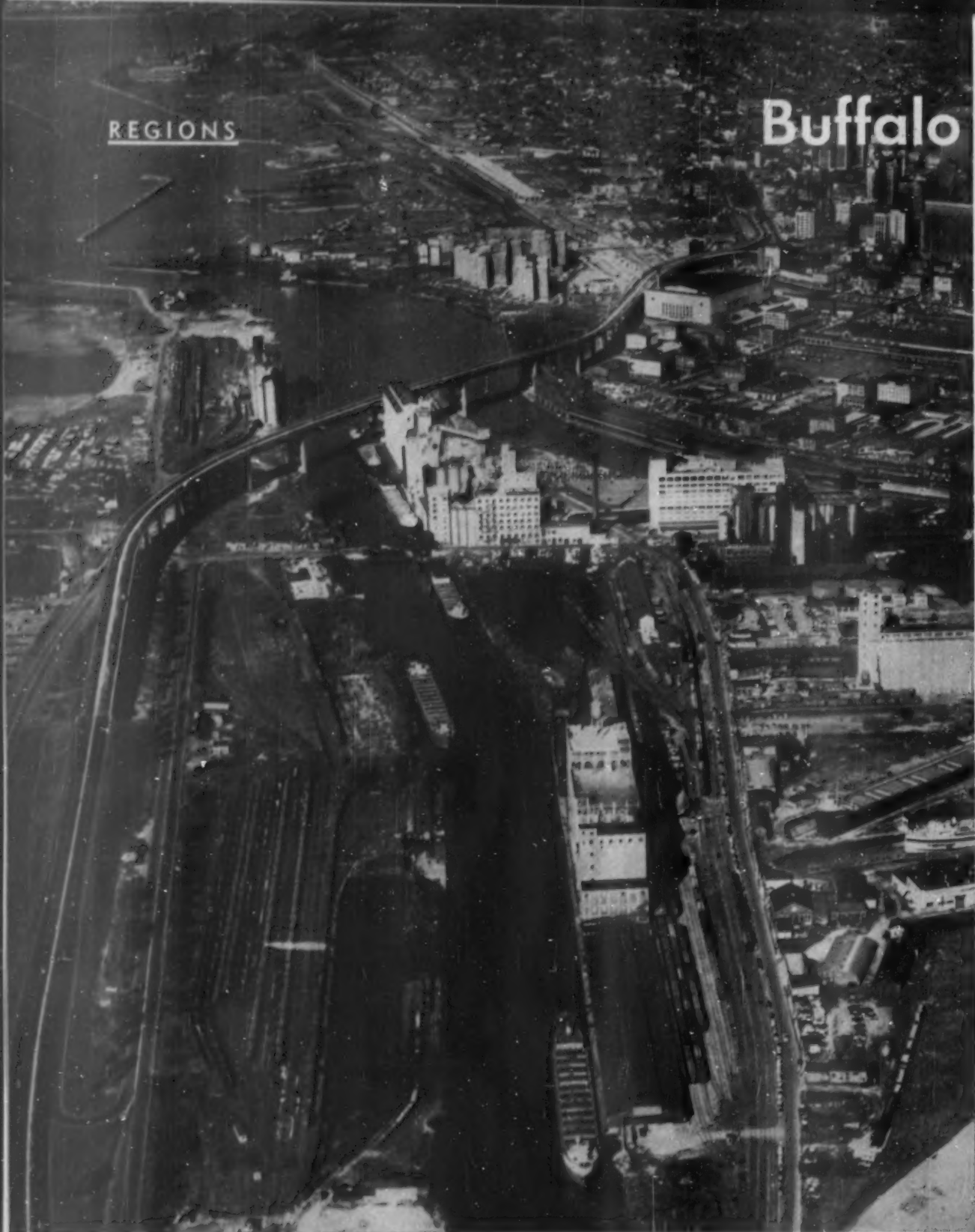
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REGIONS

Buffalo



PORT dominates eastern end of Lakes, feeds and draws from Hudson-Mohawk corridor. Bridge spans ship canal, Buffalo River.

AS RAIL CENTER, Buffalo is second only to Chicago. In flour-feed milling, it has long been world's capital.

Hits Another Jackpot

Buffalo grew up as a waterways transit point, got its biggest growth in the canal and railroad era of the 19th Century. When the St. Lawrence Seaway was proposed as a means of bringing ocean ships into the Great Lakes, Buffalo first could see nothing but a danger to its established prosperity. But now it is ready to cheer the Seaway as a spur to the city's growth, along with two other stimulants: the New York Thruway and possibly more power from Niagara Falls. Once more, Buffalo has found that its geography as a gateway between East and West amounts to an economic jackpot.

You can sense the change of feeling now. This week, metropolitan Buffalo was behaving as if the waterway had been its idea all along:

- Eight of its citizens, including Buffalo's mayor, had just climbed behind the wheel of a shiny new Niagara Frontier Authority. Rolled off the legislative lines last spring, the authority comes equipped with high hopes for port improvement, with borrowing power, and an open invitation to Seaway traffic.

- Many more of its citizens—but especially its businessmen—had begun



to show signs of downright optimism about the Seaway and Buffalo's future. The beginning of a new era, some called it. "A Golden Age," said the Buffalo Evening News, "the kind that the com-

pletion of the Erie Canal brought to the city more than a century ago."

- **The Wind Shifts**—To anyone who has known Buffalo, and its reputation for conservatism and skepticism, all this would indicate that a very different wind is blowing across the Queen City of the Lakes these days. The change of air is there all right. But it is not the cause of what is happening, only the effect. For the overriding fact is that Buffalo, which grew to a city because of its geographical and transportation blessings, is once more being changed by man's readiness to take advantage of those blessings.

The Seaway is part of it; so are the New York State Thruway and the plan for developing new power from Niagara Falls. All these are bound to work still another transformation on the Niagara Frontier, whether it is enthusiastic about it or not.

I. Water, Then Rail

Metropolitan Buffalo, or more precisely the 1,567 sq. mi. of Erie and Niagara Counties, first got to be something as a portage point, a place where Great Lakes traders detoured their freight around Niagara Falls.

When De Witt Clinton's "big ditch"—the Erie Canal—opened in 1825, it truly arrived. With the Falls barrier skirted, and Lake Erie linked to the Atlantic, Buffalo became the swing-door to the West, the gateway to a whole course of western expansion. Industry began to build, the port





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boomed, and the rip-roar of its Canal Street waterfront reverberated across the Lakes.

After water, it was rail—eleven roads in all that eventually brought their tracks to or through Buffalo and made it the second most important rail center in the U.S. Then, in the 1880s, Jacob Schoellkopf, a Buffalo tanner, applied a harness to the hydroelectric power of Niagara Falls. With alternating current coursing through the Frontier, industry—particularly chemicals and electrometallurgy—found the Buffalo area even more to its economic taste.

Each of these development phases—the canal era, the rail era, and the electric power age—left its mark on Buffalo and shaped it into what it is today. Unless there is a sharp break with history, the coming phase of Seaway, Thruway, and new power will have an equal impact. But it is this phase—at least the Seaway part of it—that Buffalo has never felt sure about.

• **City of Distinction**—Buffalo today lays claim to being the biggest U.S. inland port, not in tonnage, but in cargo value. It is the nation's largest flour-and-feed milling center, and in over-all manufacturing it stood 12th among all metropolitan areas in 1950, on a value-added basis.

Of its more than 1-million people, upwards of 203,000 were working in its factories last July.

No single industry dominates the strip of plants that gives the area its look of one never-ending factory. Steel is big enough to give it the fourth largest plant in the country—Bethlehem Steel's works at Lackawanna. But its industrial complex is one of small and medium-sized plants and great diversity.

II. Now Water Again

For years, the stand of many of Buffalo's businessmen was that the Seaway would be bound to hurt this neatly balanced economy more than it would help. Buffalo was doing nicely, thank you, just the way it was. While other Eastern metropolitan areas were losing industrial ground (BW—Aug. 13 '55, p78), it continued to show steady, though unstartling, gains. Between 1947 and 1954, its climb in manufacturing employment was just about what it was for the country as a whole—4%.

To the Buffalo Chamber of Commerce, the Seaway was not only uneconomic, but it was "contrary to the national interest." In 1952, the chamber's executive vice-president Charles C. Fichtner told the Senate Foreign Relations Committee that "from an objective viewpoint, without reference to the injurious impact on our region,

the citizens of the Niagara Frontier believe that the fullest possible benefits of the Seaway to certain regions could not even partially justify its huge construction costs nor the backlash economic wastage of existing values."

• **Entrenched Interests**—There is no question but what Buffalo's stand against the Seaway was heavily weighted by the amount of rail trackage holding down its land. The railroads spearheaded the opposition, and many of the unions came along, too. Grain would no longer stop off at Buffalo for milling, people said, but would go straight through to the seaboard ports. Fichtner and others painted word pictures of ships sailing serenely through the Welland Canal in a bypass that would leave Buffalo's citizens with nothing to do but wave from their deserted piers.

Whether or not most people felt this way is impossible to say; the fact is that a great part of the population didn't seem to care one way or the other. And it wasn't until the Seaway became an inevitable fact that this opposition and apathy began to change. The conversion is by no means complete. But there is a difference.

• **Change of Heart**—Little by little, businessmen began to feel that the Seaway really mightn't be so bad—provided the city did something about it. The chamber of commerce announced that despite its old misgivings, it was now "enthusiastically determined to derive from it every last ounce of possible benefit for the Port of Buffalo." Gradually, people seemed to talk themselves into it, and pressure began to mount for the city to get to work on the port improvements that many people felt were long overdue.

In 1951, the city of Buffalo had set up a seven-man port division. But it had little authority and less money. Not until last fall did it begin to take a realistic look at what had to be done in the port. One move was to hire Frederic R. Harris, Inc., consulting engineers, to survey the port and recommend what it should do to get ready for the Seaway. The second step was to introduce into the state legislature a bill calling for a Niagara Frontier Port Authority.

• **Getting Action**—The Harris report, generally, was an optimistic one. It found that Buffalo could, indeed, expect an increase in export-import tonnage from the Seaway, and that it would be wise to spend some money immediately to make sure of this gain. Specifically, it recommended an outlay of \$5.5-million for two new deepwater berths to be ready by the Seaway's opening in 1959. Long-range, it suggested that about \$27-million would have to be spent on improvements.

The bill for a new port authority



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passed the state legislature in its waning hours, and Gov. Harriman signed it into law in May. The cities of Buffalo, Lackawanna, and Tonawanda and five suburbs were all eligible to crawl under the authority's tent, if they wanted to. All except Tonawanda voted to come in, and Harriman has just now named the eight members—four Republicans, four Democrats—who will direct the authority's operations.

III. The New Authority

When the Authority officially begins to function next July, it will take over from the city of Buffalo its revenue-producing airport, the municipal piers, a small-boat harbor, and some parking meter revenues. From the state it will get the State Barge Canal Terminal and New York's share of the Canadian-New York Peace Bridge Authority. With this revenue—and its borrowing power—it is expected to launch work on at least some of the recommendations of the Harris report.

The job of dredging the harbor through to a 27-ft. depth is, of course, up to the federal government. This year the city got \$2-million for digging out the southern portion of the harbor to 25 ft. Meanwhile, it has already had a sharp jump in foreign trade.

- **Thruway Effect**—What many people now feel the Seaway will do for Buffalo, the New York State Thruway is already doing—at least in part. Now virtually complete, it has brought a cluster of new industries, warehouses, and truck terminals to the interchanges near its end in the Buffalo area. The estimate is that between \$50-million and \$60-million has already been poured into these new developments.

Eventually, spurs will take the Thruway directly into downtown Buffalo, to Niagara Falls, and to the Pennsylvania border. These, however, are going to have to wait some. New York voters this fall turned down the \$750-million highway bond issue that would have gone to pay for some of the work.

- **New Power**—When it comes to waiting, though, highways will have nothing on the plans for developing new power out of Niagara. Canada has long since gone ahead on construction to take advantage of the added diversion from Niagara that was called for in the treaty of 1950. But in the U. S., things are still at deadlock—and a bitter one at that.

Under the treaty, the U. S. would be able to develop another 1.6-million kw. of power from the Falls. Throughout the area, there is a solid agreement that this added capacity would be a strong sales argument for new industries and for expanding present ones. But up to now there's no agreement on who should develop the power. **END**



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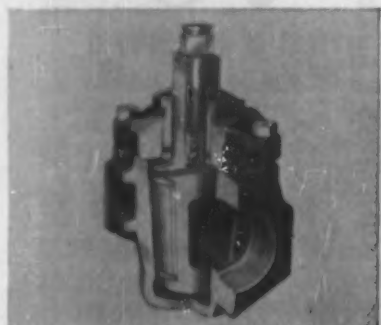
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COST CUTTING**VALVES: The Seat of the Trouble**

The first thing to go wrong on a valve is usually the seat. Ordinary valves are closed (seated) by wedging two metal surfaces together. The metal soon scores or pits (see above), especially when exposed to corrosive and abrasive materials, and the valve leaks. Result: Costly repairs, down time and production headaches.



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The Income Pattern:
 Business Week's Regional Income Indexes
U. S. Incomes: Up 6.9% From Last Year

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Federal Reserve District	% Change vs. year ago	The Indexes		
		Sept. 1955	August 1955	Sept. 1954
1. Boston	+2.5%	263.2	254.8	256.7
2. New York	+2.0%	281.1	278.6	275.7
3. Philadelphia	+4.3%	280.1	274.8	268.6
4. Cleveland	+12.5%	324.6	321.1	288.5
5. Richmond	+9.0%	344.7	339.7	316.1
6. Atlanta	+11.7%	415.7	417.2	372.2
7. Chicago	+8.9%	326.8	328.4	300.2
8. St. Louis	+6.9%	313.6	310.8	293.4
9. Minneapolis	+2.9%	325.9	324.4	316.8
10. Kansas City	+5.5%	390.7	390.4	370.2
11. Dallas	+8.6%	445.5	447.4	410.2
12. San Francisco	+7.3%	363.0	359.2	338.2
Nation	+6.9%	328.0	325.6	306.8

1941 = 100; adjusted for seasonal. September figures preliminary; August revised.

Pay Envelopes Bulge

Incomes in September were 6.9% higher than for the same month last year, according to BUSINESS WEEK's Composite of Regional Income Indexes. All 12 regions reflected an increase, but Cleveland's gain was the largest—12.5%. Steel production, which has made a tremendous comeback from the 1954 lows, accounted for this. The result is that the September, 1955, peak income for this region is being compared with a fairly low year-ago income. If the comparison is made with September, 1953, it shows that Cleveland incomes actually have risen only about 6%. The smallest year-to-year gain was in New York.

The Southern districts did well. Atlanta was up 11.7%; and Dallas, 8.6%. Chicago, too, was up a sizable amount, 8.9%, over September, 1954.

From August to September of this year, incomes edged up 0.7%, to a new high. Most of the regional changes were small, with the exception of Boston. There, incomes climbed 3.3% over the August level, finally passing the last record set in October, 1953.

Up until this time, the three East Coast regions have lagged in the overall increases that have come about this year. But in September, Boston made the grade, and New York and Philadelphia were close to their 1953 highs. Boston reports employment expansion along with more manufacturing.

As of September of this year the districts showing the highest levels were Dallas, 445; Atlanta, 415.7; and Kansas City, 390.7. The booming oil industry is one factor that has kept districts in the Southwest reporting gains.

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*Made from Exon 900 Series resins by Kaybar Industries Inc., Division of Kayo-Tex Mfg. Corp., Yardville, N. J.

Pennsylvania's 11th-Hour Tax Dilemma

● It took the state's lower house 10 months to enact a compromise tax bill, coupling excise tax on Pennsylvania manufacturers with use tax on out-of-state goods.

● But if the bill becomes law, buyers get a better federal tax break by making out-of-state purchases.

● State Senate can amend the measure. But, more likely, a whole new approach will have to be fought out.

Pennsylvania legislators wrestled this week with the problem of integrating the state's undeniable revenue needs with the U.S. tax law. Their dilemma was painful and serious.

The situation came about this way:

• The Democratic House and the Republican Senate have been stalled for 10 months over how to raise more than \$500-million in new tax revenues. Now they've run out of time and must decide.

• Democrats have been so pro-income tax and Republicans so pro-sales tax that both parties have become politically polarized. Neither can beat the other, nor can either retreat from its inflexible position.

• Last week, House Democrats steamrolled through what both parties thought might be an acceptable compromise—an unprecedented 3.5% manufacturers' excise tax coupled with a 3.5% "use" tax on products manufactured outside the state. The concept was dreamed up, bargained out, and enacted in six days. There was no debate. Copies of the bill were available less than 36 hours before the third and final vote.

• **Second Thoughts**—This week, as the Senate was set to hold hearings on the measure, almost everybody was tortured by painful second thoughts. It had become pretty clear that the tax package could put Pennsylvania manufacturers at a severe competitive disadvantage. That's because the U.S. income tax is so big a cost of doing business that buyers compete with sellers to claim any available deductions. If the tax measure becomes law as it was passed by the House last week, the new law would make it attractive for many Pennsylvanians to shun Pennsylvania products and buy those made outside the state. They would have to pay the 3.5% tax in any event. But if they paid it as a direct tax, rather than as part of the cost of a product on which someone else had paid the tax, they could deduct it on their own federal income tax returns.

A Pennsylvania steelmaker, for example, who needed a \$1-million rolling mill could buy it from any of several Pennsylvania manufacturers. If he did, the manufacturer would pay an excise tax of \$35,000, collect it in the price of the mill, \$1,035,000, and deduct the \$35,000 from his federal tax return. The buyer would have no federal income-tax deduction. But if the steelmaker bought the mill from an Ohio manufacturer for \$1-million and paid the \$35,000 use tax, he could deduct it from his federal return.

The same process would apply to wholesalers buying from manufacturers, and to retailers buying from wholesalers. About the only Pennsylvanian to whom this option would not generally apply is the man in the street. And even he could exercise it if he chose to buy out-of-state merchandise by mail.

• **Industrialists Angered**—The implications for Pennsylvania manufacturing were so broad that the state's industrialists were muttering angrily even before the House took its third vote—in slightly more than 24 hours—to pass the tax on third reading.

Ironically, in a state where you would expect to find considerable business savvy, nobody grasped the threat to Pennsylvania manufacturing until after both parties substantially had agreed to the combined excise-tax-plus-use-tax package. The Democratic Administration had no more desire to cripple Republican industrialists, competitively, than did Republican senators.

The package was sold originally on the basis that the excise tax would affect only those Pennsylvania-made products sold in Pennsylvania. And the use tax was to affect only those non-Pennsylvania-made products sold in Pennsylvania. Democrats and Republicans alike agreed that this ought to equalize the competitive burden on home-vs.-out-of-state goods. They were anxious to end the 10-month legislative impasse. And the package had these two extra attractions.

• It would raise the huge amount

needed with just one new law, rather than with half a dozen new tax measures.

• Democrats could call it a tax on business, while the Republicans could call it a sales tax. Thus, both could claim victory.

It looked exactly like what Democratic Gov. George Leader called it—"a miracle"—until people recalled the attractiveness of federal tax deductions.

• **Complications**—So this week, the GOP-controlled Senate has been grappling with the problem all over again. Since tax legislation must originate in the lower house, the Senate can only amend the bill within certain fairly narrow limits. The bill already stands under some constitutional cloud since it delegates so much authority to the State Revenue Dept.

Also, Leader inevitably will be highly suspicious of any Republican amendments, for the Republicans have denied him the income tax program he sent down, and have insisted on a sales tax—which Leader despises. This would entail a political battle under any circumstances.

It will make the issue doubly explosive now, with an important statewide election coming next year. So it looks increasingly as if amendments won't be satisfactory in any event—and as if a whole new approach must be fought out.

REGIONS BRIEFS

St. Louis County voters gave overwhelming approval last week to a \$39.7-million bond issue, the bulk of it ticketed for highways and expressways. Civic Progress, Inc. (BW—Sep. 10 '55, p130), which helped put over a \$110-million issue in the city of St. Louis last spring, again spearheaded the campaign.

• **Flood aftermath:** Walter A. Stewart, trustee and former president of American Optical Co., told a Senate hearing on food and disaster insurance that his company would relocate if some protection isn't provided. We're not going to wait around Southbridge, Mass. (BW—Sep. 10 '55, p30), to be hit by another flood, Stewart said.

• **An Indiana seaport** on Lake Michigan would make sense even without the St. Lawrence Seaway, a St. Louis engineering firm told the state Board of Public Harbors & Terminals. Suggested site: the Burns Ditch area, about 8 mi. east of Gary.



Voices under the sea

Late last summer *HMTS Monarch*, British cable ship, completed the ticklish job of laying the first of twin telephone cables across the Atlantic, from Clarenville in Newfoundland to Oban on the west coast of Scotland.

Next summer, when seas are calm again, the *Monarch* will make a return journey, laying the second of the twin cables to establish a transatlantic telephone system.

The new telephone cables are a joint venture of American Telephone and Telegraph Company, the British Post Office (which provides telephone service in Britain), and the Canadian Over-

seas Telecommunication Corporation. They will be ready for transatlantic calls by late 1956, carrying up to 36 conversations at the same time.

Thanks to the many advances in telephone science your voice will travel to Europe over the new cables as clearly as though you were talking to a neighbor down the street.

To survive strains of laying, attacks by marine borers, and years of abrasion on the ocean floor, undersea cable must be rugged indeed. Major strength element of the new cables is a spiral wrapping of 24 stout steel wires. In forming this steel armor Simplex Wire

and Cable Company, cable manufacturers, used a quantity of bethanized electrolytically zinc-coated wire.

Bethlehem developed bethanized wire to combine the full strength of steel with a rust-protective coating of pure zinc. Armoring underwater cables is a familiar assignment for bethanized wire. Engineers have long used it to strengthen and protect underwater power and communications lines. Bethanized wire has been as successful in these applications as in hundreds of everyday jobs, such as fencing, bicycle spokes, kitchen gadgets, and an array of mechanical products.

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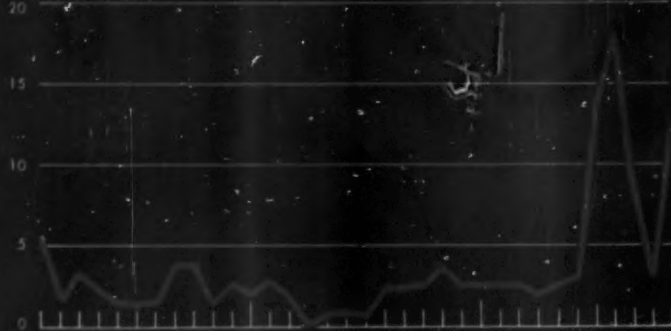
WHEN YOU
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CHARTS OF THE WEEK

New Freight Cars Ordered

Thousands of Cars



Data: Assn. of American Railroads

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Buying Spree Resumes

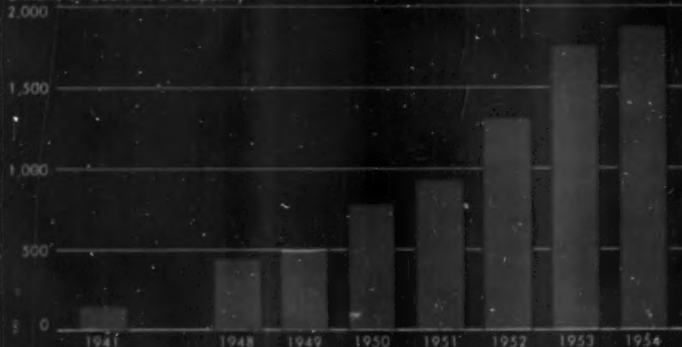
Railroads last month were back on a freight car buying spree. October orders for new freight cars amounted to 12,843, compared to 3,228 in September. In October, 1954, they totaled 2,704. The railroads began their heavy buying of new cars in June, but orders sagged sharply in September.

Deliveries of new freight cars in-

creased from 3,118 in September to 3,772 in October, the Assn. of American Railroads reports (BW - Nov. 19 '55, p34). But the order backlog also rose. On Nov. 1 it stood at 61,954 cars - up 17.1% from the previous month. That's nearly five times the total of 12,853 cars on order but undelivered on Nov. 1, 1954.

Underground Gas Storage

Billions of Cubic Ft. of Capacity



Data: American Gas Assn.

© BUSINESS WEEK

Heat for 15-Million Homes

There's enough gas stored underground to heat 15-million homes in the U. S. this winter, according to American

Gas Assn. estimates.

Increased use of gas for home heating has made the seasonal swings of demand



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sharper, with the result that underground storage facilities have become more important. The use of these facilities permits operation of gas pipelines at near-capacity levels throughout the year and assures an uninterrupted flow of gas

when it's needed. Excess gas is stored underground near the point of consumption during periods of slack demand, from early spring to midautumn, and withdrawn from the reservoir in the winter when demand is at its peak.

Business Failures

Average Number per Month



Data: Dun & Bradstreet.

© BUSINESS WEEK

Prewar Pattern Prevails

Business failures have charted a different course from business activity—clinging close to prewar levels while general prosperity sets new records. Dun & Bradstreet reported 919 failures in October—up 12% from September and up 6% from a year ago. It was the largest number of failures for any October since 1940 when 1,111 businesses folded.

All industry and trade groups except wholesaling had a larger number of failures in October than in September. Construction suffered the most severe

increase. Failures in construction were the highest in a year and a half.

The rate of failure for October was 45 per 10,000 businesses. This is an annual rate adjusted for seasonal variation. The October rate has been exceeded only once in the postwar period—in November, 1954—Dun & Bradstreet reports.

Liabilities of failures in October also moved up—5%—over the September level. The increase over October, 1954, was 20%.

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Foreign Policy for the Long Haul

It is no surprise, especially after the failure of East and West to agree at Geneva, that Democratic politicians have started sniping at the Eisenhower-Dulles foreign policy. Rightly or wrongly, the foreign policy of any Administration in this country is fair political game during an election year.

There is a somewhat disturbing element, however, in the kind of criticism that is being directed at Secy. of State Dulles by a number of influential commentators who normally have no political axe to grind.

Their charge is that the President and Secretary of State were taken in at the summit meeting by Soviet smiles and misled the American people about Soviet intentions. Dulles has compounded this sin, so the argument goes, by taking a hopeful view of East-West relations even after Molotov torpedoed the foreign ministers' conference.

We don't for a minute believe that Eisenhower and Dulles were taken in by the Soviet leaders. They went to Geneva, with the almost unanimous backing of the American people, to prove to the Russians and the rest of the world that the U.S. wants peace—and on the chance that a face-to-face meeting with the Soviet leaders might lead ultimately to a negotiated settlement of such dangerous issues as Germany. The Administration had no thought, before or after the summit conference, of dropping its guard by cutting defense or mutual security programs. Nor were the American people led to believe that this would be possible.

History may regard the summit meeting as a Western mistake in one sense. It gave the Soviet leaders, who now are sporting their smiles in India and Burma, a chance to cover up their real intentions and appear in the guise of peacemakers to the uncommitted fringe countries of the Middle East, and South Asia. But critics who today are pre-writing history in this vein completely ignore Western Europe—where the pressure for the summit meeting originated. They also ignore the fact that Dulles was able at the Geneva conference to demonstrate to the people of Britain and Western Europe—as nothing has since Korea—the true nature of Soviet intentions. That demonstration will serve as well in the struggle that still lies ahead with the Communist world.

It is tempting to look at every diplomatic engagement with the Russians as either a tremendous victory for our side or a humiliating defeat. It would be wiser to take a longer view.

The fact is that during the past year the Administration has put U.S. diplomacy on a long-haul basis just as during its first year in office it geared defense policy for the long haul. This is necessary now that we have a stalemate over the H-bomb—since no nation can contemplate a major war. An essential part of this approach

is to demonstrate at all times our willingness to negotiate a reasonable settlement with Moscow. No one has suggested an alternative.

An Acre of Moon

An enterprising Long Island businessman, Robert R. Coles, has established the Interplanetary Development Corp. for the purpose of selling real estate on the moon. Stating that no one has filed a claim on the moon, he has staked out the Copernicus Crater subdivision in the northeast quadrant of the planet, and is selling deeds at \$1 an acre.

The most surprising development in this lunar tale is that 4,500 people are reported to have purchased deeds. Many of these buyers were undoubtedly paying a tribute to Cole's imaginativeness, and others may be impelled by a streak of adventurous curiosity.

But some of the 4,500 are probably prompted by more earthy motives. There must have been a number of long-suffering commuters who figured that a trip to the moon will not be any more of a trial than what they go through daily.

If and when the moon is finally settled, we're willing to wager that the lunites of the future, like the suburbanites of today, will find that commuting won't guarantee happiness. We're willing to bet, too, that the flight to the moon, like the flight to the suburbs, will still leave our cities filled with crowds and traffic.

Christmas Giving

The approach of the Christmas season always evokes a universal feeling of warmth and good cheer. This spirit comes to life in the business community, which through the years has established its own traditions for this most hallowed of holidays.

One new tradition is the giving of gifts to worthy charities and causes in the names of business friends. This growing trend embodies the spirit of the season much more truly than the exchange of gifts between businessmen themselves. Many firms, in fact, do not allow their employees to accept gifts from business acquaintances.

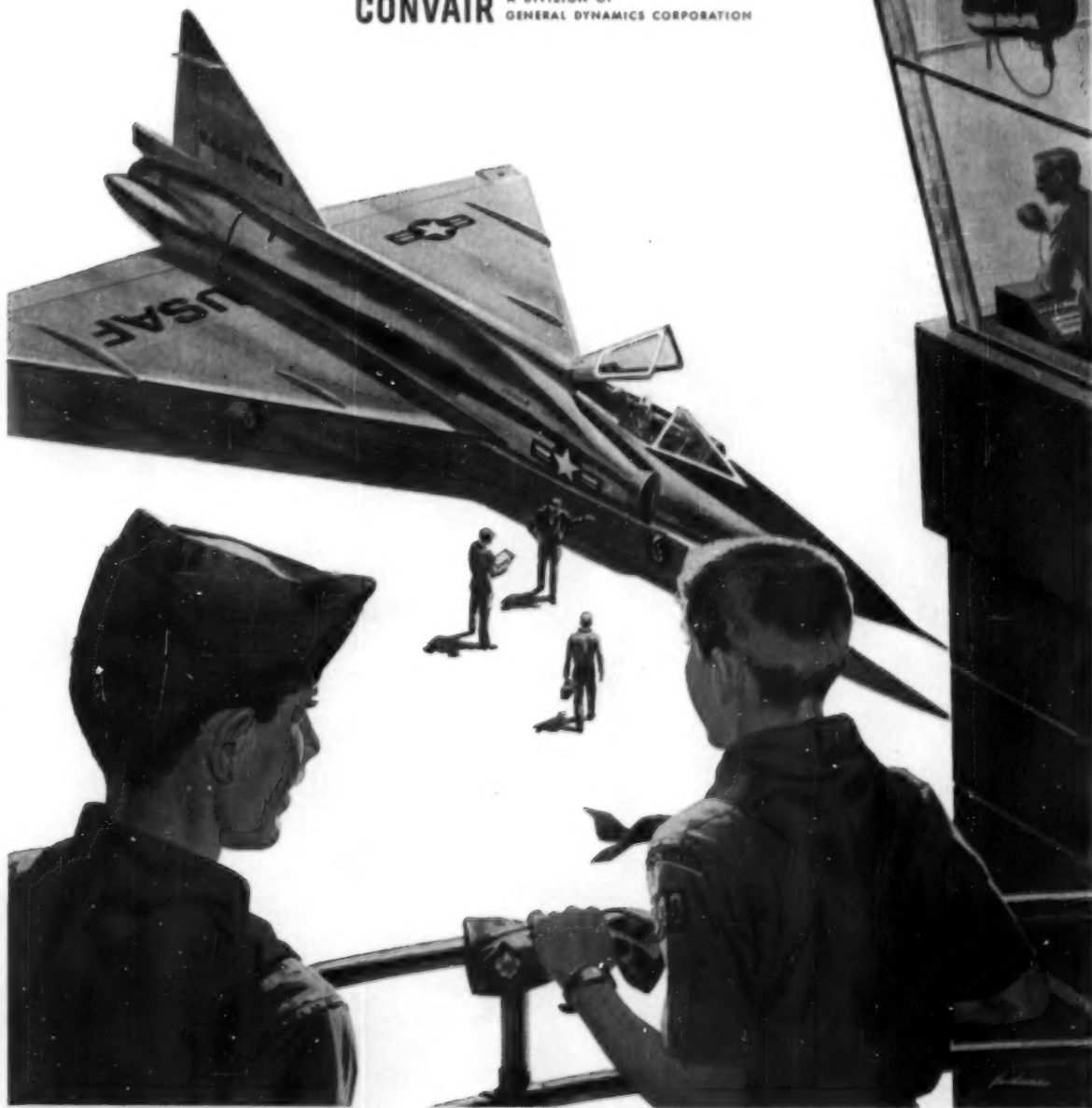
The giving to charity in the name of business friends is a source of pleasure and appreciation, not of embarrassment. Christmas, after all, is the season for giving—especially to the young and those in need. This is the time to remember the Tuberculosis Institute, the American Red Cross, and local charities like the Fresh Air Fund and Community Service, as well as hospitals, orphanages, and churches. Giving to causes such as these is a worthy Christmas tradition for businessmen everywhere.

The New American Tradition...

Be Prepared

Convair is now producing in quantity the supersonic, delta-wing F-102A. With this day-or-night, all-weather Interceptor the U.S.A.F. Air Defense Command will *be prepared* to better fulfill its mission — the discouraging of attack through the effective protection of America! Through **engineering to the Nth power** Convair continues to *be prepared* to help assure peace and freedom by producing aircraft with the capabilities of the F-102A.

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Look what's up the G.T.M.'s sleeve, now!

It's razor-sharp coral rock! The kind that's used as the aggregate in asphaltic road mixes.

In the operation pictured above, this rough, abrasive rock posed a real problem. It quickly chewed through every kind of dredging sleeve tried. Some of these flexible, rubber links between the metal pipe of the pontoon line lasted *less than 10 hours*. Average service was *only one month*. That is, until the G.T.M.—Goodyear Technical Man—stepped into the picture.

The G.T.M. recommended specifically developed Style M Dredging Sleeves. These hand-built combinations

of special rubber compounds and reinforcing fabric were made to order for the job—serve an average of six months—six times previous service. For details on these durable sleeves, or any of the more than 800 types of hose available from the G.T.M., see your Goodyear Distributor or write Goodyear, Industrial Products Division, Akron 16, Ohio.

YOUR GOODYEAR DISTRIBUTOR can quickly supply you with Hose, Flat Belts, V-Belts, Packing and Rolls. Look for him in the Yellow Pages of your Telephone Directory under "Rubber Products" or "Rubber Goods."

GOOD YEAR

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